

From: Konieczny, Katherine
To: Batra, Rakesh; Jereza, Catherine; Rosenbaum, Matthew; Mills, Brian
Cc: Drake, Christopher; Mumme, Bettina
Subject: Questions for PJM and Dominion
Date: Monday, October 16, 2017 1:51:20 PM
Attachments: Questions for PJM and Dominion 2017-10-16.docx
Importance: High

Following the Friday meeting, we tried to capture the technical questions that were raised in a short list for PJM and Dominion. That list is attached. Rakesh, because you sent the last round of questions to PJM and Dominion, it would be consistent if this next list also came from you. (b) (5)

please review the document to make sure (1) all questions are correctly phrased from an engineering perspective, and (2) the list is complete and reflects what was discussed on Friday. All edits are welcome.

Considering the tight timeline DOE has, the document requests an initial response by COB Wednesday the 18th, with an opportunity to submit more complete information by Monday the 23rd. (b) (5) We defer to OE on how difficult it will be for PJM and Dominion to put together responses.

Because we are (b) (5) asking for PJM and Dominion's answers by COB Wednesday, please send this document out as quickly as you can--this afternoon if possible.

Thank you,
Kathy

Katherine (Kathy) Konieczny
Acting Assistant General Counsel for Electricity and Fossil Energy
Forrestal 6D-033
(202) 586-0503
Katherine.Konieczny@hq.doe.gov

PJM and Dominion:

DOE seeks more information to better understand alternatives to Yorktown Unit 1 & 2 operation. Please provide an initial response to the following questions in writing no later than Wednesday, October 18. Additional information, if any, should be submitted by Monday, October 23.

Demand Response

- What is the maximum power (in kW or MW) that Dominion can save, under ideal conditions, through its demand response program?
- What is the estimated minimum cost (or cost range) of reaching the maximum demand response? Who would pay that cost?

Distributed Generation Resources

- What is the maximum power (in kW or MW) that Dominion can save, under ideal conditions, through distributed generation resources (*e.g.*, rooftop solar)?
- What is the estimated minimum cost (or cost range) of reaching the maximum distributed generation? Who would pay that cost?

Battery Storage Resources

- What is the maximum power (in kW or MW) that Dominion can save, under ideal conditions, through its existing battery storage resources?
- How long does it take to procure battery storage, and what is the minimum price per MW?

Other Alternatives

- How much alternative power would Dominion need to mobilize to preserve reliability during a transmission outage and without running either Yorktown coal unit?
- How much would that mobilization cost? Who would pay that cost?

From: Drake, Christopher
To: Konieczny, Katherine
Cc: Batra, Rakesh
Subject: RE: Questions for PJM and Dominion
Date: Monday, October 16, 2017 3:52:24 PM
Attachments: Questions for PJM and Dominion 2017-10-16v2.docx

Kathy,

(b) (5)

I revised the question document accordingly, as attached. Rakesh, if you have further thoughts on it, please let us know.

Thanks,
Chris

-----Original Message-----

From: Batra, Rakesh
Sent: Monday, October 16, 2017 3:00 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>
Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Mumme, Bettina <Bettina.Mumme@hq.doe.gov>
Subject: RE: Questions for PJM and Dominion

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(b) (5)

PJM submitted an answer to the comments filed by Sierra Club on September 6, 2017, in the above referenced proceeding ("Comments") in response to PJM's Order No. 201-17-2 ("Order") renewal application ("Renewal Application"). The next 2 paragraphs are direct quotes from the filing.

Currently, approximately 14 MW of PJM Demand Response is available in the in the North Hampton Roads area on the Virginia Peninsula. Since usage is limited, PJM will only implement DR as needed post-contingency to restore customer load.

Currently, Dominion Energy Virginia has about 20 MW of Demand Side Management capabilities in the peninsula in the form of remote air-conditioning control as well as the ability to curtail a large industrial customer up to 75 MWs for transmission emergencies. This air conditioning control is limited to a total of 120 hours and for 30 days during the summer months. Dominion Energy Virginia will reserve this capability for the highest need days to reduce load in the North Hampton Roads area on the Virginia Peninsula.

Moreover, Appendix II of the Application details the availability of other generation in the North Hampton Roads areas of the Virginia Peninsula and again specifies the availability of demand response and other information noted above and concludes: "Thus while PJM and Dominion Energy Virginia have a very limited amount of demand response available of the peninsula, it is not sufficient to ensure reliable service.

Please let me know if you feel otherwise.

Thanks,
Rakesh

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From: Konieczny, Katherine
Sent: Monday, October 16, 2017 1:51 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>;

Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>
Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Mumme, Bettina <Bettina.Mumme@hq.doe.gov>
Subject: Questions for PJM and Dominion
Importance: High

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- According to PJM's RTEP Input Assumptions and Scope Whitepaper, Dominion could have a maximum of 130 MW of distributed solar generation available during the summer. Is that number still accurate? If not, what is the correct number?
- Neither PJM nor Dominion stated that alternative resources besides demand response and distributed generation, including battery storage, would be available to offset power loss during a scheduled transmission outage. Is that still accurate? If not, what alternative resources are available, and how much power could they provide?
- According to the Summary of Findings issued alongside DOE Order No. 202-17-4, the Yorktown coal units offset 950 MW of load that could be shed in a transmission outage. Is that number still accurate? If not, what is the correct number?

From: Konieczny, Katherine
To: Drake, Christopher
Cc: Batra, Rakesh
Subject: RE: Questions for PJM and Dominion
Date: Monday, October 16, 2017 3:55:12 PM

I'm fine with that approach. My only comment is that there appears to be a missing quotation mark in the first bullet.

-----Original Message-----

From: Drake, Christopher
Sent: Monday, October 16, 2017 3:52 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Cc: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: RE: Questions for PJM and Dominion

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To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>
Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Munne, Bettina <Bettina.Munne@hq.doe.gov>
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To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>;

Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>

Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Mumme, Bettina <Bettina.Mumme@hq.doe.gov>

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Katherine.Konieczny@hq.doe.gov

From: Drake, Christopher
To: Batra, Rakesh
Cc: Konieczny, Katherine
Subject: RE: Questions for PJM and Dominion
Date: Monday, October 16, 2017 4:07:22 PM
Attachments: Questions for PJM and Dominion 2017-10-16v3.docx

Rakesh,

Per our conversations, we would appreciate it if you could send the revised version of the questions (attached) to PJM and Dominion first thing tomorrow morning (Tuesday 10/17).

Thanks,
Chris

Chris Drake
Attorney-Adviser
U.S. Department of Energy, Office of General Counsel
Office of Electricity & Fossil Energy (GC-76)
Forrestal North, Room 6B-256
Tel. 202.586.2919
Christopher.Drake@hq.doe.gov

This communication may contain privileged or confidential material. Potential privileges include, but are not limited to, Attorney-Client, Attorney Work-Product, and Deliberative Process.

PJM and Dominion:

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From: Konieczny, Katherine
To: Batra, Rakesh; Drake, Christopher
Cc: Rosenbaum, Matthew
Subject: RE: Questions for PJM and Dominion
Date: Tuesday, October 17, 2017 9:19:09 AM

We'll swing by as soon as Chris gets in.

-----Original Message-----

From: Batra, Rakesh
Sent: Tuesday, October 17, 2017 7:24 AM
To: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Questions for PJM and Dominion

Chris & Kathy:

I discussed this with Matt and would like to talk to either of you. Could you please stop by any time this morning?

Thanks,
Rakesh

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Sent: Monday, October 16, 2017 3:52 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
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To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>;

Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>

Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Mumme, Bettina <Bettina.Mumme@hq.doe.gov>

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Katherine.Konieczny@hq.doe.gov

From: Drake, Christopher
To: Jereza, Catherine; Konieczny, Katherine; Mumme, Bettina; Batra, Rakesh; Rosenbaum, Matthew
Subject: Short discussion on factual material for 202(c) rehearing order
Attachments: DRAFT Summary of Findings Order No. 202-18-1 2017-10-19-BM10-20-17 clean.docx

All,

Attached is the latest working version of the draft Summary of Findings to accompany the Order on Rehearing. GC-51 has a few edits that we will incorporate when the time comes.

From: [Konieczny, Katherine](#)
To: [Drake, Christopher](#); [Jereza, Catherine](#); [Mumme, Bettina](#); [Batra, Rakesh](#); [Rosenbaum, Matthew](#); [Mills, Brian](#)
Subject: RE: Short discussion on factual material for 202(c) rehearing order
Date: Friday, October 20, 2017 1:55:10 PM
Attachments: [DRAFT Order 202-18-1 2017-10-19 500p.docx](#)
[DRAFT Summary of Findings Order No. 202-18-1 2017-10-20 130pm.docx](#)

Please use the attached documents instead. I apologize that you received a version with unnecessary comment bubbles and tracked changes.

-----Original Appointment-----

From: Drake, Christopher
Sent: Thursday, October 19, 2017 5:26 PM
To: Drake, Christopher; Jereza, Catherine; Konieczny, Katherine; Mumme, Bettina; Batra, Rakesh; Rosenbaum, Matthew
Subject: Short discussion on factual material for 202(c) rehearing order
When: Friday, October 20, 2017 2:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: TPTA

<< File: DRAFT Summary of Findings Order No. 202-18-1 2017-10-19-BM10-20-17 clean.docx
>>

All,

Attached is the latest working version of the draft Summary of Findings to accompany the Order on Rehearing. GC-51 has a few edits that we will incorporate when the time comes.

From: Mikolop, Todd S.
To: ["The.Secretary@hq.doe.gov"](mailto:The.Secretary@hq.doe.gov); [Hoffman, Patricia](#); [Jereza, Catherine](#); [Batra, Rakesh](#); [Konieczny, Katherine](#)
Cc: [Finto, Kevin](#); [Michael Regulinski](#); [Pincus, Steven](#); ["sanjay.narayan@sierraclub.org"](mailto:sanjay.narayan@sierraclub.org)
Subject: DOE Order No. 202-17-4: Virginia Electric and Power Company and PJM Interconnection LLC Motion for Leave to Answer and Answer to Sierra Club's Petition for Rehearing
Date: Friday, October 20, 2017 2:14:29 PM
Attachments: [image001.jpg](#)
[Virginia Elec. Power FPA 202\(c\) Motion for Leave to Answer Sierra Club 2nd Rehearing Request 67018691 4.PDF](#)

Dear Secretary Perry,

On behalf of Kevin Finto, counsel for the Virginia Electric and Power Company (Dominion Energy Virginia), and PJM Interconnection LLC, please find the attached Motion for Leave to Answer and Answer to the Sierra Club's Petition for Rehearing of the DOE's Order No. 202-17-4.

Please contact Mr. Finto or me if you have any questions or require further information regarding this proceeding.

Respectfully submitted,

Todd S. Mikolop



Todd Mikolop

Senior Attorney

tmikolop@hunton.com

p 202.778.2249

m(b) (6)

[bio](#) | [vCard](#) | [blog](#)

Hunton & Williams LLP

2200 Pennsylvania Avenue, NW

Washington, DC 20037

hunton.com

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

Virginia Electric and Power Company)
(Dominion Energy Virginia))

Order No. 202-17-4

**MOTION FOR LEAVE TO ANSWER AND ANSWER OF
VIRGINIA ELECTRIC AND POWER COMPANY
AND PJM INTERCONNECTION LLC**

Pursuant to Rules 212 and 713 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“Commission” and “Commission Rules”), 18 C.F.R. §§ 385.212, 385.713(c)(3)¹, the Virginia Electric and Power Company (“Dominion Energy Virginia”) and PJM Interconnection LLC (“PJM”) respectfully submits to the Secretary for the Department of Energy (“Secretary” and “Department”) this Motion for Leave to Answer (“Motion”) and Answer (“Answer”) to the Sierra Club’s Petition for Rehearing (“Petition”) of the Secretary’s Order No. 202-17-4 (the “Renewal Order”) submitted on October 5, 2017.

I. Point of Order

As an initial point of order, while the Renewal Order does not explicitly identify the parties to this proceeding, Dominion Energy Virginia seeks to clarify that it is a party of right. Commission Rule 102, 18 C.F.R. §385.102(c)(1) states that a “party” means “any respondent to a proceeding” and subsection (f)(1) states that a respondent means any person “to whom an order

¹ The Department has previously indicated that its regulations pertaining to Federal Power Act § 202(c) emergency authority at 10 C.F.R. § 205.370 *et seq.* do not contain a rehearing section, but that parties should look to guidance on rehearing procedures from the Commission Rules. E-mail from Lot Cooke, Dep’t of Energy Office of Gen. Counsel, to Linda Alle-Murphy, Assoc., Schnader Harrison Segal & Lewis L.L.P. (December 28, 2005 9:05 AM) *available at*: <https://energy.gov/oe/downloads/question-and-answer-procedural-questions-application-rehearing-order-no-202-05-02> (“The DOE regulations on emergency orders, 10 CFR section 205.370, *et seq.*, do not have specific rehearing section, but a party seeking rehearing can look for procedural guidance to FERC’s Rules of Practice and Procedure, 18 CFR Part 385.”). Therefore, to the extent possible, this Motion and Answer is stylized under the Commission Rules. However, in doing so, Dominion Energy Virginia does not necessarily concede that the Commission Rules govern this proceeding.

... is issued by the Commission.” The Renewal Order issued by the Secretary is explicitly directed at Dominion Energy Virginia: Dominion Energy Virginia “shall” operate Units 1 and/or 2 of the Yorktown Power Station (“Yorktown”) as directed by PJM; Dominion Energy Virginia “shall continue to comply with the dispatch methodology submitted by PJM; Dominion Energy Virginia “shall” report all dates on which Yorktown Units 1 and/or 2 are operated as well as the estimated emissions and water usage data associated with their operation.² Because Dominion Energy Virginia is a person to whom the Renewal Order is issued, it is a respondent and, therefore, a party of right to this proceeding.³

II. Motion for Leave to Answer

Dominion Energy Virginia and PJM respectfully move for leave to answer the Petition. While Commission Rules discourage answers to rehearing requests, a party may answer a rehearing request if permitted by the decisional authority (here the Secretary or his designee).⁴ For its part, the Commission has permitted a party to answer a request for rehearing when those answers help to clarify complex issues, provide additional information, or are otherwise helpful in the Commission’s decision-making process.⁵ Likewise, the Department has permitted “submission” of any additional comments, information, or analysis on the operation of and/or effects of an order under FPA § 202(c) as such operation and/or effects may be relevant to a

² Renewal Order at 2.

³ Dominion Energy Virginia’s position as a party of right to this proceeding is explicitly evident from the face of the Renewal Order. However, out of an abundance of caution, and to preserve our rights, should the Secretary deem Dominion Energy Virginia not to be a party to this proceeding, then, pursuant Commission Rule 214, 18 C.F.R. § 385.214, Dominion Energy Virginia respectfully moves to intervene in this proceeding. Dominion Energy Virginia’s interest in this proceeding is clear by the number of actions ordered of it under the Renewal Order.

⁴ 18 C.F.R. § 385.213.

⁵ See *Black Oak Energy, L.L.C. v. PJM Interconnection, L.L.C.*, 125 FERC ¶ 61,042 at P 14 (2008) (accepting answer to rehearing request because the Commission determined that it has “assisted us in our decision-making process.”); *FPL Marcus Hook, L.P. v. PJM Interconnection, L.L.C.*, 123 FERC ¶ 61,289 at P 12 (2008) (accepting “PJM’s and FPL’s answers [to rehearing requests], because they have provided information that assisted us in our decision-making process.”).

decision on the request for rehearing.⁶ As demonstrated below, all of these criteria are met by the Answer. Therefore, Dominion Energy Virginia and PJM respectfully request that the Secretary grant this Motion because the Answer will help clarify the record and contribute to an understanding of the operation and/or effects of the Renewal Order.

III. Answer

Sierra Club raises two issues in its Petition: (1) whether the Department satisfied the National Environmental Policy Act in issuing the Renewal Order by invoking a categorical exclusion; and (2) whether the Department, in issuing the Renewal Order demonstrated that it mandates environmental compliance to the maximum extent practicable or limits the hours of operation to the those necessary to meet the emergency or serve the public interest. For the reasons set forth below, the answer to both questions is yes. The Sierra Club's arguments are without merit.

A. The Department Properly Categorically Excluded the Renewal Order from Review under the National Environmental Policy Act.

Sierra Club asserts that the Department improperly applied a "categorical exclusion" in determining that the Renewal Order was not subject to further review pursuant to the National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.* ("NEPA"). As it did in its first Petition submitted on July 13, 2017, Sierra Club first suggests that the Department did not comply with the statute and asks the Secretary to do more review than NEPA requires.

The Department fulfilled its NEPA obligations by analyzing the effects of the Renewal Order and determining that activities were categorically excluded from NEPA's requirement to prepare either an environmental assessment or an environmental impact statement. Further,

⁶ *Response to Requests for Rehearing of DOE Dec. 20, 2005 DOE Order No. 202-05-3*, Order No. 202-06-1, Docket No. EO-05-01, Feb. 17, 2006.

Sierra Club fails to recognize authority granted by Congress in the FPA regarding applicability and enforceability of environmental law while the Renewal Order is in effect. The Department appropriately determined that issuing the Renewal Order is an action that is categorically excluded from further NEPA analysis.

1. NEPA Allows for Categorical Exclusions

NEPA is a procedural statute that requires a federal agency to assess the environmental effects of a proposed action prior to making a decision on the action. An agency assesses a major federal action significantly affecting the human environment in a detailed statement known as an “environmental impact statement” (“EIS”).⁷ If the agency determines from the outset that the action does not require preparation of an EIS, or determines that analysis is required to determine whether to prepare an EIS, the agency is authorized by regulation to prepare an “environmental assessment” (“EA”).⁸ An agency may also determine that certain categories of actions do not individually or cumulatively have a significant effect on the human environment and, therefore, neither an EA nor an EIS is required. These categories of actions are known as “categorical exclusions.”⁹

Categorical exclusions are individually determined by federal agencies using agency-specific procedures.¹⁰ The Department establishes categorical exclusions pursuant to a rulemaking for defined classes of actions that the Department determines are supported by a record showing that they normally will not have significant environmental impacts, individually or cumulatively.¹¹ This record is based on the Department’s experience, the experience of other

⁷ 42 U.S.C. § 4332(c).

⁸ 40 C.F.R. § 1501.4(a)-(c).

⁹ *Id.* at § 1508.4.

¹⁰ *Id.* at § 1501.4(a)(2).

¹¹ 76 Fed Reg. 63,765 (Oct. 13, 2011).

agencies, completed environmental reviews, professional and expert opinion, and scientific analyses.¹² The Department also considers public comment received during the rulemaking.¹³

Categorical exclusions are not exemptions or waivers of NEPA review, “they are simply one type of NEPA review.”¹⁴ Once established, categorical exclusions provide an efficient tool to complete the NEPA environmental review process for proposals that normally do not require more resource-intensive EAs or EISs.¹⁵ The use of categorical exclusions can reduce paperwork and delay, so that EAs or EISs are targeted toward proposed actions that truly have the potential to cause significant environmental effects.¹⁶

2. The Renewal Order fits within the Power Management Categorical Exclusion

The Department’s categorical exclusions include activities related to power marketing services applied in the Renewal Order.¹⁷ These activities include, but are not limited to, storage, load shaping and balancing, seasonal exchanges, and other similar activities, provided that the operations of generating projects would remain within normal operating limits.¹⁸

As part of its environmental review responsibilities under NEPA, a Department NEPA Compliance Officer was required to examine the proposed Renewal Order to determine whether it qualified for a categorical exclusion. The Department’s process is consistent with that described in the Council on Environmental Quality’s (“CEQ”) Categorical Exclusion Guidance: “When determining whether to use a categorical exclusion for a proposed activity, a Federal agency must carefully review the description of the proposed action to ensure that it fits within

¹² *Id.*

¹³ *Id.*

¹⁴ 75 Fed. Reg. 75,631.

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ 10 C.F.R. Pt. 1021, Subpt. D, App. B, B4.4.

¹⁸ *Id.*

the category of actions described in the categorical exclusion. Next, the agency must consider the specific circumstances associated with the proposed activity, to rule out any extraordinary circumstances that might give rise to significant environmental effects requiring further analysis and documentation” in an EA or EIS.¹⁹ The Department’s record of this process is known as a “Record of Categorical Exclusion Determination.”

As described in the Record of Categorical Exclusion Determination accompanying the Renewal Order and included in the docket for the Renewal Order²⁰, the Department applied a single categorical exclusion that applies to power marketing services and activities. In the first Application for Order submitted on June 13, 2017 and incorporated by reference in the Renewal Application, PJM requested authorization to order Dominion Energy Virginia to operate the Yorktown Units 1 and 2 when total demand for electricity “exceeds certain levels to avoid impacting electric reliability and potential violations of Reliability Standards developed by the North American Electric Reliability Corporation (“NERC”) in the North Hampton Roads area.”²¹ This type of activity fits squarely within the power marketing services and activities exclusion, which includes load balancing “that helps ensure system reliability by managing energy resources to be equal with load.”²² The Record of Categorical Exclusion also stated that “DOE has determined that the proposed action identified above will not have a significant effect on the human environment.”²³

¹⁹ 75 Fed. Reg. at 75,631.

²⁰ Findings of Fact at 9.; Records Of Categorical Exclusion Determination Order No. 202-17-4 (Sept. 11, 2017)

²¹ Application at 2.

²² 76 Fed. Reg. 63,777 (Oct. 13, 2011).

²³ Records of Categorical Exclusion at 3.

3. Sierra Club's NEPA arguments are meritless.

Sierra Club argues that “the operations required by the Department’s Order do not comply with the Clean Air Act standards and therefore are not within normal limits.”²⁴ The Department properly applied the power marketing and services categorical exclusion because the operations of Yorktown Units 1 and/or 2 will remain within normal operating limits.²⁵ The term “normal operating limits” means the capacity of generating units. As stated in the Records of Categorical Exclusion, “[t]he expected combined operation of Yorktown Units 1 and 2 reacting to electricity reliability emergencies under DOE Order No. 202-17-4 will be well below normal operating capacities and limits of Yorktown Units 1 and 2.”²⁶

As described in the Application and in the Renewal Order, Dominion Energy Virginia had been operating the subject units under authorization from the Environmental Protection Agency (“EPA”) under an Administrative Compliance Order on Consent (“ACO”) that includes further operational limitations restricting the capacity of the generating units. In the Summary of Findings accompanying its Renewal Order, the Department noted that it had consulted with the EPA and reviewed estimated emissions and water usage data, and that the Renewal Order “continues the operational limitations” in the EPA’s ACO.²⁷ These limits, approved by a federal agency with jurisdiction, can only be considered “normal” or, truly, more restrictive than “normal” operating limits associated with generating capacity. Indeed, the on-going normalcy of these limits is confirmed every two weeks when Dominion Energy Virginia’s reports to the

²⁴ Sierra Club Petition at 1.

²⁵ The Department should not be misled by the Sierra Club’s suggestion in subheading IV.A. of the Petition that the Department “should assess the impacts of its action under the National Environmental Policy Act.” The analysis that led to application of a categorical exclusion is, in itself, an assessment of the impacts under NEPA. That Sierra Club wishes the Department had done more than required by law is of no consequence to whether the Department fully complied with NEPA.

²⁶ Records of Categorical Exclusion at 3.

²⁷ Summary of Findings at 9.

Department all dates on which Yorktown Units 1 and/or 2 have operated and the associated air emissions and water usage for those dates.

Sierra Club's argument that the Renewal Order compels violations of EPA's Mercury and Air Toxics Standards under the Clean Air Act, which consequently cannot be considered "normal operations,"²⁸ is a red herring. Congress carefully crafted FPA § 202(c) to take into account potential violations of federal environmental laws that may result from the issuance of an emergency order. That compliance with such an order "results in noncompliance with, or causes such party to not comply with, any Federal, State, or local environmental law or regulation, such omission or action shall not be considered a violation of such environmental law or regulation, or subject such party to any requirement, civil or criminal liability, or a citizen suit under such environmental law or regulation."²⁹ Thus, any emissions resulting from compliance with the Renewal Order that may not comply with regulations promulgated under the Clean Air Act are not violations, much less emissions that are not "normal." Because FPA § 202(c) provides this exemption, application of the powering marketing services and power management activities categorical exclusion to issue the Renewal Order would not result in violations of the Clean Air Act and was consequently appropriate.

B. Sierra Club Misconstrues FPA Requirements where an Order Conflicts with Environmental Regulations.

According to FPA § 202(c)(2), where, as in this proceeding, an order conflicts with a Federal environmental law, the Department "shall ensure that such order requires generation, delivery, interchange, or transmission of electric energy only during hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable, is consistent

²⁸ *Id.* at 14.

²⁹ FPA § 202 (c)(3).

with any applicable Federal, State, or local environmental law or regulation and minimizes any adverse environmental impacts.” The Renewal Order itself describes in detail the manner in which the Department has fulfilled these requirements. Sierra Club, however, challenges the Department’s consultation with the EPA regarding short-term emissions limitations and misconstrues the actual extent of Yorktown Units 1 and/or 2’s operations in an effort to expand measures the Department may require to limit emissions.

1. The Department Properly Consulted with the EPA.

Sierra Club alleges that the Department’s consultation with the EPA was deficient because Sierra Club thinks the record does not contain sufficient information.³⁰ FPA § 202 (c)(4)(B) requires consultation with the primary Federal agency with expertise in the environmental interest (here, the EPA) but does not proscribe how the agencies should consult or what records should be included in the public docket beyond any conditions the EPA determines are necessary to minimize adverse impacts to the extent practicable. As noted in the Summary of Findings, after consulting with EPA, and consistent with that consultation, the Department found that the only appropriate short-term emissions limitation on Yorktown Units 1 and 2 would be to curtail operating hours to the maximum extent practicable for reliability purposes. By consulting with the EPA, the Department met its statutory obligation. Even if, in its discretion, the Department considered doing more, the fact is that the limited use – on an emergency basis – of Yorktown Units 1 and/or 2 would be reason enough to not consult any more than the Department did. Sierra Club’s desire that the Department had done more is simply not supported by law or the instant facts.

³⁰ Petition at 9.

2. The Limitations on Operations Are Appropriate.

Sierra Club misconstrues the extent to which Yorktown Units 1 and/or 2 will operate pursuant to the Renewal Order. While conceding that curtailing operating hours is the only practicable means of limiting emissions, Sierra Club implies that the Units will be operating full-time for 18-20 months. This is simply not the case. The Renewal Order, in fact, only authorizes operation of Yorktown Units 1 and/or 2 “in the event generation ... is needed to maintain grid reliability.” History and future projections show that the need is far less than full time and, in total, may only amount to 81 days over the entire 18-20 month period.³¹ Therefore, given the relatively low use of the Units, there is simply no need for the Department to require Dominion Virginia Energy to limit operations any more than the Renewal Order already does.

Finally, Sierra Club suggests that demand side management or distributive generation would reduce the number of hours of operation of Yorktown 1 and 2. The Renewal Order specifically requires PJM and Dominion to exhaust all reasonably available resources including demand side management and behind the meter generation sources prior to operating Yorktown Unit 1 or Yorktown Unit 2.³² Sierra Club provides comments by Ariel Horowitz suggesting that alternatives for distributive generation or demand side management might be available to solve the problem. Horowitz, however, admits that he does not know the load levels or deficiencies that need to be addressed.³³ Moreover, far more robust solutions were carefully considered in the Corps permit process and failed to prove practicable. Such a demonstration for demand side management or distributive generation is made more difficult by the fact that Skiffes Creek Project is the chosen and authorized solution and any other alternative would have only a temporary benefit.

³¹ See Renewal Application dated August 24, 2017, at page 3.

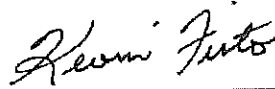
³² Renewal Order at 2; Findings of Fact at 9, 10.

³³ Horowitz comments at 19.

IV. Conclusion

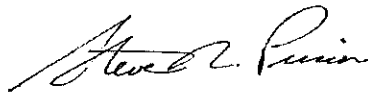
Dominion Energy Virginia respectfully requests that the Secretary grant its Motion and take into consideration this Answer.

Respectfully submitted,



Kevin J. Finto
Hunton & Williams, LLP
951 East Byrd Street
Richmond, VA 23219
(804) 788-8568 (Phone)
Counsel for
Virginia Electric and Power Company

Michael C. Regulinski
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120 Tredegar Street
Richmond, VA 23219
(804) 819-2794 (Phone)



Steven R. Pincus
Associate General Counsel
PJM Interconnection, LLC
2750 Monroe Boulevard
Audubon, PA 19403
(610) 666-4370 (phone)

Dated: October 20, 2017

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon:

Pat Hoffman, U.S. Department of Energy
Katherine Konieczny, Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Sanjay Narayan, Sierra Club

Dated at Richmond, VA this 20th day of October, 2017.

Kevin J. Finto
Hunton & Williams, LLP
951 East Byrd Street
Richmond, VA 23219
(804) 788-8568 (Phone)
Counsel for
Virginia Electric and Power Company

Document withheld in full
pursuant to Exemption (b)(5)

From: Mikolop, Todd S.
To: [Secretary Perry](#); [Hoffman, Patricia](#); [Jereza, Catherine](#); [Batra, Rakesh](#); [Konieczny, Katherine](#)
Cc: [Finto, Kevin](#); [Michael Regulinski](#); [Pincus, Steven](#); "sanjay.narayan@sierraclub.org"
Subject: DOE Order No. 202-17-4: Virginia Electric and Power Company and PJM Interconnection LLC Motion for Leave to Answer and Answer to Sierra Club's Petition for Rehearing
Date: Friday, October 20, 2017 2:27:59 PM
Attachments: [image001.jpg](#)
[Virginia Elec. Power FPA 202\(c\) Motion for Leave to Answer Sierra Club 2nd Rehearing Request 67018691 5.PDF](#)

(Re-sending due to a rejected e-mail address)

Dear Secretary Perry,

On behalf of Kevin Finto, counsel for the Virginia Electric and Power Company (Dominion Energy Virginia), and PJM Interconnection LLC, please find the attached Motion for Leave to Answer and Answer to the Sierra Club's Petition for Rehearing of the DOE's Order No. 202-17-4.

Please contact Mr. Finto or me if you have any questions or require further information regarding this proceeding.

Respectfully submitted,

Todd S. Mikolop



Todd Mikolop

Senior Attorney

tmikolop@hunton.com

p 202.778.2249

m(b) (6)

[bio](#) | [vCard](#) | [blog](#)

Hunton & Williams LLP

2200 Pennsylvania Avenue, NW

Washington, DC 20037

hunton.com

From: Drake, Christopher
To: Batra, Rakesh
Subject: RE: Password for non-public PJM 202(c) applications
Date: Monday, October 23, 2017 1:56:26 PM

Sure - I'll be right up

-----Original Message-----

From: Batra, Rakesh
Sent: Monday, October 23, 2017 1:55 PM
To: Drake, Christopher <Christopher.Drake@hq.doe.gov>
Subject: RE: Password for non-public PJM 202(c) applications

Chris:

Could you please stop by (b) (5)

for 5-10 minutes?

Thanks,
Rakesh

-----Original Message-----

From: Drake, Christopher
Sent: Monday, October 23, 2017 12:10 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Cc: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: Password for non-public PJM 202(c) applications

Kathy,

(b) (5)

Chris Drake
Attorney-Adviser
U.S. Department of Energy, Office of General Counsel
Office of Electricity & Fossil Energy (GC-76)
Forrestal North, Room 6B-256
Tel. 202.586.2919
Christopher.Drake@hq.doe.gov

From: Pincus, Steven
To: Batra, Rakesh
Cc: Michael Regulinski; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Konieczny, Katherine; Mohammed Alfayyoumi
Subject: RE: Information request PJM and Dominion Responses
Date: Monday, October 23, 2017 4:57:10 PM

Dear Mr. Batra: PJM and Dominion submits response to the questions below. Please do not hesitate to contact me if you have any questions.

Respectfully submitted,

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Tuesday, October 17, 2017 9:58 AM

To: Pincus, Steven; Michael Regulinski; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Burlew, James M.

Subject: Information request

External Email! Think before clicking links or attachments.

PJM and Dominion:

DOE seeks more information to better understand alternatives to Yorktown Unit 1 & 2 operation.

Please provide an initial response to the following questions in writing no later than Wednesday, October 18. Additional information, if any, should be submitted by Monday, October 23.

- According to Appendix II of PJM's June 2017 Application, "PJM has approximately 14 MW of PJM Demand Response available on the peninsula and Dominion Energy Virginia has about 20 MW of Demand Side Management capability on the peninsula in the form of remote air conditioning control as well as the ability to curtail a large industrial customer an average of 75 MWs for transmission emergencies (but the air conditioning control is limited to a total of 120 hours and for 30 days during the summer months). Are those numbers still accurate? If not, what are the correct numbers?

PJM Response: The 14 MWs of PJM Demand Response available on the Virginia Peninsula was based on PJM's analysis for the 2016/2017 Planning Year. This value changes once a year and the value for the 2017/2018 Planning Year is 26 MWs. This change is not material as it does not alter the analysis submitted in the Federal Power Act Section 202(c) application submitted on June 13, 2017 (the "Application") and the renewal application submitted on August 24, 2017 ("Renewal Application"). Of the 26 MWs of Demand Response for the 2017/2018 Planning Year, 14.5 MWs are only available from 6/1 to 9/30, and 11 MW are available from 6/1 to 10/31, and during the month of May. Only 0.7 MWs is available throughout the entire Planning Year. PJM analyses continue to indicate the reliability issues on the Virginia Peninsula cannot be mitigated by the available Demand Response alone and the need to rely on Yorktown Units 1 and 2 remains as stated in the Application and Renewal Application. Most of the reliability problems are voltage related and Demand Response resources are not able to provide the dynamic reactive support that Yorktown 1 and 2 units are capable of providing.

Dominion Response: Dominion Energy Virginia still has available about 20 MW of Demand Side Management capability on the peninsula in the form of remote air conditioning control (limited to a total of 120 hours and for 30 days during the summer months). As stated in Appendix III of the June 13 Application, Dominion Energy Virginia will reserve this capability for the highest need days to reduce load in the North Hampton Roads area on the Virginia Peninsula. With regard to Dominion Energy Virginia's ability to curtail a large industrial customer an average of 75 MWs for transmission emergencies, this curtailment is only available where the customer load is about 99 MW, so that the reduced customer total load is not more than 24 MWs. However, this customer's load during the 2017 summer months has averaged about 40 MWs total, so the 75 MW reduction is not available.

- According to PJM's RTEP Input Assumptions and Scope Whitepaper, Dominion could have a maximum of 130 MW of distributed solar generation available during the summer. Is that number still accurate? If not, what is the correct number?

PJM Response: The 130 MWs of distributed solar generation identified in PJM's RTEP Input Assumptions and Scope Whitepaper while still accurate does not represent "a maximum of 130 MW of distributed solar generation available during the summer." More accurately it represents PJM's forecast of the amount of distributed solar generation that would occur in the entire Dominion zone at typical peaking conditions in 2017. Moreover, distributed solar would already be accounted for in load values for the load forecast studies performed by PJM and Dominion Energy Virginia.

- Neither PJM nor Dominion stated that alternative resources besides demand response and distributed generation, including battery storage, would be available to offset power loss during a scheduled transmission outage. Is that still accurate? If not, what alternative resources are available, and how much power could they provide?

PJM Response: In Appendix II of the Application (and the Renewal Application which incorporates by reference the information from Appendix II), PJM stated that Dominion also "owns and operates on Virginia Peninsula and the oil-fired at the Yorktown Power Station ("Yorktown Unit 3"). While Yorktown Unit 3 with a capacity of 789 MW could, in theory, be available at higher load conditions, Yorktown Unit 3 has limitations which prevent PJM from relying on that unit consistently and for extended periods of time. Yorktown Unit 3 is operating pursuant to a capacity factor limitation to comply with MATS under the rule's limited use oil-fired unit provisions defined in 40 CFR 63.10042. These provisions limit Unit 3's annual capacity factor when burning oil to less than 8 percent of its maximum capacity or nameplate heat input, whichever is less, averaged over a 24 month block contiguous period, the first of which commenced on May 1, 2015, (the first of the month following the compliance date specified in the MATS rule at 40 CFR 63.9984 (April 16, 2015). Exceeding the 8 percent capacity factor limitation would subject the unit to stringent emission limits for particulate matter, mercury, hydrogen chloride and hydrogen fluoride that would require extensive and costly retrofit pollution controls." This information on alternative resources including the available Demand Response as updated above, is still accurate.

- According to the Summary of Findings issued alongside DOE Order No. 202-17-4, the Yorktown coal units offset 950 MW of load that could be shed in a transmission outage. Is

that number still accurate? If not, what is the correct number?

PJM Response: The information regarding the Remedial Action Scheme or RAS as stated in the Application and Renewal Application is still accurate. Absent the availability of Yorktown Units 1 and 2, upon loss of certain facilities, the RAS will trip the remaining feeds to the Virginia Peninsula which sheds electric service to approximately 950 MWs of load to prevent voltage collapse during certain peak periods.

Thanks,
Rakesh Batra
202-586-1283

Document withheld in full
pursuant to Exemption (b)(5)

From: Konieczny, Katherine
To: Batra, Rakesh; Jereza, Catherine; Drake, Christopher; Rosenbaum, Matthew
Subject: RE: PJM / Dominion order
Date: Wednesday, October 25, 2017 10:34:49 AM

Katie and Rakesh,

(b) (5)

-Kathy

-----Original Message-----

From: Batra, Rakesh
Sent: Wednesday, October 25, 2017 10:00 AM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Subject: FW: PJM / Dominion order

Cathy:

(b) (5)

Chris, please let us know if you or Kathy feel otherwise.

Thanks,
Rakesh

-----Original Message-----

From: Jereza, Catherine
Sent: Wednesday, October 25, 2017 9:35 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: PJM / Dominion order

Hi Rakesh - (b) (5)

Thanks
Katie

From: Pincus, Steven
To: Batra, Rakesh; Michael Regulinski
Cc: Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; McGlynn, Paul; Bresler, Frederick S. (Stu) III
Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching
Date: Wednesday, October 25, 2017 4:16:08 PM
Attachments: RE Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching.msg

Rakesh: Attached is Mike Regulinski's reply email to your email message dated September 5, 2017. Please let us know if this is not what you need or if you have any other questions.

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Wednesday, October 25, 2017 3:53 PM

To: Michael Regulinski

Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; McGlynn, Paul; Bresler, Frederick S. (Stu) III

Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

External Email! Think before clicking links or attachments.

For some reason the below email from September 5, 2017, was not responded. Could you please provide/clarify the definition of operational limit?

Thanks,

Rakesh

From: Batra, Rakesh

Sent: Tuesday, September 05, 2017 11:40 AM

To: 'Michael Regulinski' <michael.regulinski@dominionenergy.com>

Cc: Pincus, Steven <Steven.Pincus@pjm.com>; Bryson, Mike E. <Michael.Bryson@pjm.com>; Souder, David W. <David.Souder@pjm.com>; Tam, Simon K. <Simon.Tam@pjm.com>; 'craig.glazer@pjm.com' <craig.glazer@pjm.com>; McGlynn, Paul <Paul.McGlynn@pjm.com>; Bresler, Frederick S. (Stu) III <Stu.Bresler@pjm.com>

Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Could you please clarify the definition of operational limit?

Thanks,

Rakesh

From: Michael Regulinski [mailto:michael.regulinski@dominionenergy.com]

Sent: Tuesday, September 05, 2017 11:04 AM

To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>

Cc: Pincus, Steven <Steven.Pincus@pjm.com>; Bryson, Mike E. <Michael.Bryson@pjm.com>; Souder, David W. <David.Souder@pjm.com>; Tam, Simon K. <Simon.Tam@pjm.com>; 'craig.glazer@pjm.com' <craig.glazer@pjm.com>; McGlynn, Paul <Paul.McGlynn@pjm.com>; Bresler, Frederick S. (Stu) III <Stu.Bresler@pjm.com>

Subject: FW: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Rakesh, here is the information you requested regarding Yorktown Units 1 and 2. Please let me know if you have further questions. Mike

	Yorktown 1	Yorktown 2
Name plate (kVA)	200,535	218,000
Min Real Output (MW)	85.0	85.0
Max Real Output (MW)	159.0	164.0
Lagging MVAR	65.0	81.0
Leading MVAR	-50.0	-48.0
Ramp up/down (MW/Min)	1.0	1.4
Operational Limits (MW)	135.0	135.0

Michael C. Regulinski
Managing General Counsel
Dominion Energy Services, Inc.
tieline: 738-2794
P: (804) 819-2794
C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]

Sent: Thursday, August 24, 2017 11:28 AM

To: Pincus, Steven; Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.

Cc: Glazer, Craig; McGlynn, Paul; Bresler, Frederick S. (Stu) III

Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching PJM /Dominion:

Could you please provide us the name plate rating, Min & Max Real and reactive power outputs, Ramp up and down time and any operational limits for both the coal units at Yorktown location?

Thanks,
Rakesh

CONFIDENTIALITY NOTICE: This electronic message contains information which may be legally confidential and or privileged and does not in any case represent a firm ENERGY COMMODITY bid or offer relating thereto which binds the sender without an additional express written confirmation to that effect. The information is intended solely for the individual or entity named above and access by anyone else is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution, or use of the contents of this information is prohibited and may be unlawful. If you have received this electronic transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.

From: Michael Regulinski
To: Batra, Rakesh
Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; McGlynn, Paul; Bresler, Frederick S. (Stu) III
Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching
Date: Tuesday, September 05, 2017 6:03:01 PM

External Email! Think before clicking links or attachments.

Rakesh,

The installed capacity rating for Yorktown Units 1 and 2 was lowered to 135 MW each, effective in June, 2017. We directed PJM to lower the values in the PJM eDART system. We have not performed normal long term maintenance on either unit so we have constrained the units to 135 MWs due to operational concerns. This load level allows us to meet the reliability needs of PJM and safely operate the units. We do not plan to operate the units higher than 135 for any reason.

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794

P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Tuesday, September 05, 2017 11:40 AM

To: Michael Regulinski (Services - 6)

Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; 'craig.glazer@pjm.com'; McGlynn, Paul; Bresler, Frederick S. (Stu) III

Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Could you please clarify the definition of operational limit?

Thanks,

Rakesh

From: Michael Regulinski [mailto:michael.regulinski@dominionenergy.com]

Sent: Tuesday, September 05, 2017 11:04 AM

To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>

Cc: Pincus, Steven <Steven.Pincus@pjm.com>; Bryson, Mike E. <Michael.Bryson@pjm.com>; Souder, David W. <David.Souder@pjm.com>; Tam, Simon K. <Simon.Tam@pjm.com>; 'craig.glazer@pjm.com' <craig.glazer@pjm.com>; McGlynn, Paul <Paul.McGlynn@pjm.com>; Bresler, Frederick S. (Stu) III <Stu.Bresler@pjm.com>

Subject: FW: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Rakesh, here is the information you requested regarding Yorktown Units 1 and 2. Please let me know if you have further questions. Mike

	Yorktown 1	Yorktown 2
Name plate (kVA)	200,535	218,000
Min Real Output (MW)	85.0	85.0
Max Real Output (MW)	159.0	164.0
Lagging MVar	65.0	81.0

Leading MVAR	-50.0	-48.0
Ramp up/down (MW/Min)	1.0	1.4
Operational Limits (MW)	135.0	135.0

Michael C. Regulinski
Managing General Counsel
Dominion Energy Services, Inc.
tieline: 738-2794
P: (804) 819-2794
C: (b) (6)
michael.regulinski@dominionenergy.com

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]
Sent: Thursday, August 24, 2017 11:28 AM
To: Pincus, Steven; Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.
Cc: Glazer, Craig; McGlynn, Paul; Bresler, Frederick S. (Stu) III
Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching
PJM /Dominion:
Could you please provide us the name plate rating, Min & Max Real and reactive power outputs, Ramp up and down time and any operational limits for both the coal units at Yorktown location?
Thanks,
Rakesh

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From: Michael Regulinski
To: Batra, Rakesh
Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; "craig.glazer@pjm.com"; McGlynn, Paul; Bresler, Frederick S. (Stu) III
Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching
Date: Wednesday, October 25, 2017 4:37:29 PM
Attachments: RE Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching.msg

Rakesh, as we discussed on the phone, we found our response to the September 5 email. I will ask management about the difference between the operational limits shown in our email response and the MW output levels shown in the August 24 Yorktown Run Time report for the July runs.

Thanks,

Michael C. Regulinski
 Managing General Counsel
 Dominion Energy Services, Inc.

tieline: 738-2794

P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]
Sent: Wednesday, October 25, 2017 3:53 PM
To: Michael Regulinski (Services - 6)
Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; 'craig.glazer@pjm.com'; McGlynn, Paul; Bresler, Frederick S. (Stu) III
Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching
 For some reason the below email from September 5, 2017, was not responded. Could you please provide/clarify the definition of operational limit?
 Thanks,
 Rakesh

From: Batra, Rakesh
Sent: Tuesday, September 05, 2017 11:40 AM
To: 'Michael Regulinski' <michael.regulinski@dominionenergy.com>
Cc: Pincus, Steven <Steven.Pincus@pjm.com>; Bryson, Mike E. <Michael.Bryson@pjm.com>; Souder, David W. <David.Souder@pjm.com>; Tam, Simon K. <Simon.Tam@pjm.com>; 'craig.glazer@pjm.com' <craig.glazer@pjm.com>; McGlynn, Paul <Paul.McGlynn@pjm.com>; Bresler, Frederick S. (Stu) III <Stu.Bresler@pjm.com>
Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching
 Could you please clarify the definition of operational limit?
 Thanks,
 Rakesh

From: Michael Regulinski [<mailto:michael.regulinski@dominionenergy.com>]
Sent: Tuesday, September 05, 2017 11:04 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Cc: Pincus, Steven <Steven.Pincus@pjm.com>; Bryson, Mike E. <Michael.Bryson@pjm.com>; Souder, David W. <David.Souder@pjm.com>; Tam, Simon K. <Simon.Tam@pjm.com>; 'craig.glazer@pjm.com' <craig.glazer@pjm.com>; McGlynn, Paul <Paul.McGlynn@pjm.com>; Bresler, Frederick S. (Stu) III <Stu.Bresler@pjm.com>

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Rakesh, here is the information you requested regarding Yorktown Units 1 and 2. Please let me know if you have further questions. Mike

	Yorktown 1	Yorktown 2
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tieline: 738-2794
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michael.regulinski@dominionenergy.com

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]
Sent: Thursday, August 24, 2017 11:28 AM
To: Pincus, Steven; Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.
Cc: Glazer, Craig; McGlynn, Paul; Bresler, Frederick S. (Stu) III
Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching
PJM /Dominion:
Could you please provide us the name plate rating, Min & Max Real and reactive power outputs, Ramp up and down time and any operational limits for both the coal units at Yorktown location?
Thanks,
Rakesh

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From: Konieczny, Katherine
To: Mills, Brian; Drake, Christopher; Jereza, Catherine; Mumme, Bettina; Batra, Rakesh; Rosenbaum, Matthew
Cc: Le Duc, Edward
Subject: RE: Short discussion on factual material for 202(c) rehearing order
Date: Thursday, October 26, 2017 9:22:18 AM

(b) (5)

Please feel free to reach out for further explanation.

Thanks,
 Kathy

-----Original Message-----

From: Mills, Brian
Sent: Wednesday, October 25, 2017 2:36 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Mumme, Bettina <Bettina.Mumme@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Cc: Le Duc, Edward <Edward.LeDuc@hq.doe.gov>
Subject: RE: Short discussion on factual material for 202(c) rehearing order

Re: Order No. 202-18-1

(b) (5)

-----Original Message-----

From: Konieczny, Katherine
Sent: Friday, October 20, 2017 1:55 PM
To: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Mumme, Bettina <Bettina.Mumme@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>
Subject: RE: Short discussion on factual material for 202(c) rehearing order

Please use the attached documents instead. I apologize that you received a version with unnecessary comment bubbles and tracked changes.

-----Original Appointment-----

From: Drake, Christopher
Sent: Thursday, October 19, 2017 5:26 PM
To: Drake, Christopher; Jereza, Catherine; Konieczny, Katherine; Mumme, Bettina; Batra, Rakesh; Rosenbaum, Matthew
Subject: Short discussion on factual material for 202(c) rehearing order
When: Friday, October 20, 2017 2:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: TPTA

<< File: DRAFT Summary of Findings Order No. 202-18-1 2017-10-19-BM10-20-17 clean.docx >>

All,

Attached is the latest working version of the draft Summary of Findings to accompany the Order on Rehearing. GC-

51 has a few edits that we will incorporate when the time comes.

From: Michael Regulinski
To: Batra, Rakesh
Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; "craig.glazer@pjm.com"; McGlynn, Paul; Bresler, Frederick S. (Stu) III
Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching
Date: Friday, October 27, 2017 2:48:36 PM

Rakesh, you requested an explanation of the difference between the operational limits for Yorktown Units 1 and 2 which were lowered to 135 MW each, effective in June, 2017, and the MW output levels shown in the Yorktown July 2017 Run Time report for the July 11-25 runs directed by PJM and reported to DOE on August 24, which exceeded 135 MWs on several occasions.

The MW values provided in the Yorktown Run Time report for the July runs reflect the gross values of plant MW output. Emission data is determined on gross MW values. The 135 MW operational limit reflects the net MW output of the plant, which is the gross output of the units reduced by station auxiliary power, which is the power needed to operate the station itself and the generation units.

Please let me know if you have additional questions. Mike

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794

P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

From: Michael Regulinski (Services - 6)

Sent: Wednesday, October 25, 2017 4:37 PM

To: 'Batra, Rakesh'

Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; 'craig.glazer@pjm.com'; McGlynn, Paul; Bresler, Frederick S. (Stu) III

Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Rakesh, as we discussed on the phone, we found our response to the September 5 email. I will ask management about the difference between the operational limits shown in our email response and the MW output levels shown in the August 24 Yorktown Run Time report for the July runs.

Thanks,

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794

P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]

Sent: Wednesday, October 25, 2017 3:53 PM

To: Michael Regulinski (Services - 6)

Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; 'craig.glazer@pjm.com'; McGlynn, Paul; Bresler, Frederick S. (Stu) III

Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching
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Managing General Counsel
Dominion Energy Services, Inc.
tieline: 738-2794
P: (804) 819-2794
C: (b) (6)
michael.regulinski@dominionenergy.com

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]
Sent: Thursday, August 24, 2017 11:28 AM
To: Pincus, Steven; Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.
Cc: Glazer, Craig; McGlynn, Paul; Bresler, Frederick S. (Stu) III
Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching
PJM /Dominion:
Could you please provide us the name plate rating, Min & Max Real and reactive power outputs, Ramp up and down time and any operational limits for both the coal units at Yorktown location?
Thanks,
Rakesh

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From: Konieczny, Katherine
To: Batra, Rakesh; Rosenbaum, Matthew; Jereza, Catherine; Mills, Brian
Subject: 202(c) order on rehearing draft summary of findings
Date: Monday, October 30, 2017 5:28:57 PM
Attachments: DRAFT Summary of Findings Order No. 202-18-1 2017-10-30 445pm.docx
Importance: High

Hello. The most recent draft summary of findings is attached and reflects feedback we received from Matt and Rakesh in response to questions. As always, please review the entire document for accuracy. (b) (5)

Thank you,
Kathy

Katherine (Kathy) Konieczny
Acting Assistant General Counsel for Electricity and Fossil Energy
Forrestal 6D-033
(202) 586-0503
Katherine.Konieczny@hq.doe.gov

From: Konieczny, Katherine
To: Batra, Rakesh; Drake, Christopher
Cc: Bittner, Kathy (CONTR); Jereza, Catherine; Rosenbaum, Matthew
Subject: RE: Rehearing Order
Date: Monday, October 30, 2017 5:30:28 PM

Rakesh, DOJ and OE were provided with the latest draft today, and EPA received the excerpt that concerns that agency, and I expect to receive rolling comments. (b) (5)

From: Batra, Rakesh

Sent: Monday, October 30, 2017 11:43 AM

To: Konieczny, Katherine ; Drake, Christopher ; King-Gilmore, Christy

Cc: Bittner, Kathy (CONTR) ; Jereza, Catherine ; Rosenbaum, Matthew

Subject: Rehearing Order

Could you please update the status of the Siera Club Rehearing order?

When can we expect the final draft?

I need to update Kathy Bittner.

Thanks,

Rakesh

From: Konieczny, Katherine
To: Batra, Rakesh; Rosenbaum, Matthew
Cc: Drake, Christopher
Subject: RE: 202(c)
Date: Tuesday, October 31, 2017 12:40:08 PM

PRIVILEGED - ATTORNEY CLIENT - ATTORNEY WORK-PRODUCT

Great! We'll swing by at 1:30. (b) (5)

-----Original Message-----

From: Batra, Rakesh
Sent: Tuesday, October 31, 2017 12:31 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: 202(c)

Sure, you can stop by any time. (b) (6)

-----Original Message-----

From: Konieczny, Katherine
Sent: Tuesday, October 31, 2017 11:50 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: 202(c)

Do you have time early this afternoon to discuss another technical question that have come up?

Thanks,
Kathy

Katherine (Kathy) Konieczny
Acting Assistant General Counsel for Electricity and Fossil Energy
Forrestal 6D-033
(202) 586-0503
Katherine.Konieczny@hq.doe.gov

From: Michael Regulinski
To: Batra, Rakesh
Subject: Yorktown Unit 3
Date: Wednesday, November 01, 2017 5:18:23 PM

We are gathering the data you requested and expect to get it to you COB Thursday.

Sent from my iPhone

Please excuse weird auto corrections

From: Michael Regulinski
To: [Batra, Rakesh](#)
Subject: Re: Yorktown 3 data
Date: Thursday, November 02, 2017 10:18:06 AM

Should get it to you by noon.

Sent from my iPhone
Please excuse weird auto corrections

On Nov 1, 2017, at 5:02 PM, Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov> wrote:

COB Thursday will not work. Need it before noon.
Thanks

From: Michael Regulinski <happypop9000@gmail.com>
Date: Wednesday, Nov 01, 2017, 4:44 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Cc: Steven R. Pincus <Steven.Pincus@pjm.com>
Subject: Yorktown 3 data

Rakesh, the engineers are digging up the data you requested. Our ETA is Thursday COB. Thanks
Mike

Sent from my iPhone
Please excuse weird auto corrections

From: Drake, Christopher
To: Batra, Rakesh
Subject: E-mails for the Summary of Findings
Date: Thursday, November 02, 2017 10:54:09 AM
Importance: High

Rakesh,

We're collecting the supporting documents for the Summary of Findings to go with the 202(c) order. Could you please save the following emails as pdfs and send them to me?

- Email from S. Pincus to R. Batra (Oct. 23, 2017)
- Email from M. Regulinski to R. Batra (Sept. 5, 2017)
- Email from M. Regulinski to R. Batra (Oct. 27, 2017)

(b) (5)

Also, if you could share the draft action memo with us as soon as you can, that would be great!

Thanks for all your help & talk to you soon

Chris Drake

Attorney-Adviser

U.S. Department of Energy, Office of General Counsel

Office of Electricity & Fossil Energy (GC-76)

Forrestal North, Room 6B-256

Tel. 202.586.2919

Christopher.Drake@hq.doe.gov

From: Michael Regulinski
To: Batra, Rakesh
Cc: Pincus, Steven; Sharon L. Burr; Rick R Linker; Miranda R Yost; Mohammed Alfayyoumi; Mike Barmer
Subject: DOE Informal Question
Date: Thursday, November 02, 2017 11:01:41 AM
Attachments: YT3 Days of Operation 2014 2016.xlsx

Rakesh, here is the information you requested Tuesday night over the phone regarding Yorktown Unit 3 operations. The following chart reflects Unit 3 operation presented in the same manner we provided the information for Units 1 and 2.

	Yorktown 3
Name plate (kVA)	980,000
Min Real Output (MW)	300.0
Max Real Output (MW)	789.0
Lagging MVar	300.0
Leading MVar	-180.0
Ramp up/down (MW/Min)	5.0
Operational Limits (MW)	789.0

Attached are YT 3 days of operations from 2014 thru 2016. We rounded to full days because that is what our records contain.

The Top 5 reasons for Yorktown 3 reliability concerns are as follow.

1. Structural duct work and dampers repairs
2. LP Turbine inspections/repairs
3. Waterbox repairs
4. Turbine valve work/repairs
5. Various Boiler tube leaks

Please call my cell if you need additional information (b) (6)

Thanks, Mike

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794

P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

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Yorktown-3 : Days of Operation

01/2014 - 12/2016

Yorktown-3 : 01/2014 - 12/2016 : Total Run Times

Start Date	End Date	Duration (Days)
1/6/2014	1/9/2014	3
1/20/2014	1/22/2014	2
1/23/2014	1/24/2014	1
1/27/2014	1/31/2014	4
8/20/2014	8/23/2014	3
8/25/2014	8/27/2014	2
1/1/2015	1/1/2015	0
1/7/2015	1/9/2015	2
2/2/2015	2/5/2015	3
2/14/2015	2/21/2015	7
6/14/2015	6/16/2015	2
7/19/2015	7/21/2015	2
7/26/2015	7/30/2015	4
8/3/2015	8/7/2015	4
12/14/2015	12/15/2015	1
1/12/2016	1/14/2016	2
2/11/2016	2/15/2016	4
6/2/2016	6/4/2016	2
7/23/2016	7/26/2016	3
8/30/2016	9/1/2016	1
11/30/2016	12/2/2016	2
		54

From: [Drake, Christopher](#)
To: [Batra, Rakesh](#)
Subject: RE: DOE Informal Question
Date: Thursday, November 02, 2017 11:17:03 AM

Great – thanks for this, Rakesh. And can you please send me this e-mail as a pdf, along with the other three e-mails (Sept. 5, Oct. 23, Oct. 27)?

From: Batra, Rakesh

Sent: Thursday, November 02, 2017 11:15 AM

To: Konieczny, Katherine ; Drake, Christopher ; Rosenbaum, Matthew ; Mills, Brian

Subject: FW: DOE Informal Question

Additional information about Yorktown Unit #3. In the past 3 years they ran Unit #3 for only 54 days.

From: Michael Regulinski [<mailto:michael.regulinski@dominionenergy.com>]

Sent: Thursday, November 02, 2017 11:01 AM

To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>

Cc: Pincus, Steven <Steven.Pincus@pjm.com>; Sharon L. Burr

<sharon.l.burr@dominionenergy.com>; Rick R Linker <rick.r.linker@dominionenergy.com>; Miranda

R Yost <Miranda.R.Yost@dominionenergy.com>; Mohammed Alfayyumi

<mohammed.alfayyumi@dominionenergy.com>; Mike Barmer

<mike.barmer@dominionenergy.com>

Subject: DOE Informal Question

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4. Turbine valve work/repairs
5. Various Boiler tube leaks

Please call my cell if you need additional information (b) (6)

Thanks, Mike

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794

P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

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From: [Drake, Christopher](#)
To: [Batra, Rakesh](#)
Subject: RE: E-mails for the Summary of Findings
Date: Thursday, November 02, 2017 11:28:04 AM

Excellent – thank you! Exactly what we’re looking for

From: Batra, Rakesh
Sent: Thursday, November 02, 2017 11:26 AM
To: Drake, Christopher <Christopher.Drake@hq.doe.gov>
Subject: RE: E-mails for the Summary of Findings

<< File: RE_ Information request PJM and Dominion Responses Oct 23.pdf >> << File: FW_ Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching Sept 5.pdf >> << File: RE_ Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching Oct 27.pdf >>

From: Drake, Christopher
Sent: Thursday, November 02, 2017 10:54 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: E-mails for the Summary of Findings
Importance: High

Rakesh,

We're collecting the supporting documents for the Summary of Findings to go with the 202(c) order. Could you please save the following emails as pdfs and send them to me?

- Email from S. Pincus to R. Batra (Oct. 23, 2017)
- Email from M. Regulinski to R. Batra (Sept. 5, 2017)
- Email from M. Regulinski to R. Batra (Oct. 27, 2017)

(b) (5)

Also, if you could share the draft action memo with us as soon as you can, that would be great!

Thanks for all your help & talk to you soon

Chris Drake

Attorney-Adviser

U.S. Department of Energy, Office of General Counsel

Office of Electricity & Fossil Energy (GC-76)

Forrestal North, Room 6B-256

Tel. 202.586.2919

Christopher.Drake@hq.doe.gov

From: Konieczny, Katherine
To: Batra, Rakesh; Drake, Christopher; Rosenbaum, Matthew; Mills, Brian
Cc: Jereza, Catherine
Subject: RE: 202 (C) Rehearing Request Order
Date: Thursday, November 02, 2017 2:30:17 PM
Attachments: Compare order 202-18-1.docx
Compare Summary of Findings.docx
DRAFT Order 202-18-1 2017-11-1.docx
DRAFT Summary of Findings Order No. 202-18-1 2017-11-2 2pm CLEAN.docx
Importance: High

The latest drafts of both Order No. 202-18-1 and the Summary of Findings are attached. (Compared to the versions we emailed you on Monday) Please let us know if you have any concerns/questions/edits. (b) (5)

-----Original Message-----

From: Konieczny, Katherine
Sent: Thursday, November 02, 2017 2:13 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: 202 (C) Rehearing Request Order

(b) (5) and I'll have a new draft to you in the next few minutes for your review. (b) (5)
Should I send the final to Katie and Kathy B when it's ready? Who has the action memo?

-----Original Message-----

From: Batra, Rakesh
Sent: Thursday, November 02, 2017 2:11 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: 202 (C) Rehearing Request Order

Kathy & Chris,

Matt and I stopped by your offices couple of times today. (b) (6)

(b) (5) If there is anything we can help you with before we leave, please let us know.

Thanks,
Rakesh Batra
202-586-1283

From: Jereza, Catherine
To: Bittner, Kathy (CONTR)
Cc: Konieczny, Katherine; Drake, Christopher; Batra, Rakesh; Rosenbaum, Matthew
Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)
Date: Monday, November 06, 2017 3:36:29 PM
Attachments: Signed Order 202-18-1.pdf

Hi Kathy – do you have the electronic version that includes John Lucas' edits? Can you send so we can make sure the right version goes out.

Once we have that, I'll be sending the email out below.

Thanks!

Katie

From: Jereza, Catherine

To: Steven.Pincus@pjm.com; craig.glazer@pjm.com; michael.regulinski@dominionenergy.com; sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org

Cc: Walker, Bruce; Hoffman, Patricia; Batra, Rakesh; Konieczny, Katherine

Subject: DOE Order 202-18-1

Good evening,

Today the Secretary of Energy issued Order No. 202-18-1. The Order and Summary of Findings are attached.

Regards,

Katie

From: Bittner, Kathy (CONTR)

Sent: Monday, November 06, 2017 3:07 PM

To: Jereza, Catherine

Cc: Rosenbaum, Matthew

Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Katie and Matt,

Just wanted to make sure that you are aware that the order was signed (see attached).

Let me know if you need anything else.

Thanks,

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Bittner, Kathy (CONTR)

Sent: Friday, November 03, 2017 3:31 PM

To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>

Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Katie and Matt,

FYI..I took the package to Exec Sec. It has cleared Exec Sec review and is with the Deputy Secretary now.

Have a great weekend.

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

From: Jereza, Catherine

Sent: Friday, November 03, 2017 12:35 PM

To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>

Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy – I'm in my office now.

Cheers

Katie



Department of Energy
Washington, DC 20585


Order No. 202-18-1

Order No. 202-17-4, dated September 14, 2017, authorizes the operation of coal-fired Yorktown Power Station Units 1 and 2, only for reliability purposes and under strict conditions, through December 13, 2017. I issued that Order by my authority under section 202(c) of the Federal Power Act (FPA), 16 U.S.C. § 824a(c). On October 6, 2017, Sierra Club moved to intervene and petitioned for rehearing of Order No. 202-17-4, pursuant to FPA section 313(a), 16 U.S.C. § 8251(a). On October 20, the Virginia Electric and Power Company (Dominion) and PJM Interconnection LLC (PJM) filed a motion for leave to answer and answer to Sierra Club's petition, including a point of order wherein Dominion sought clarification that it is a party of right.

Sierra Club's motion to intervene is hereby granted. The Department takes no position, however, on whether Sierra Club is an "aggrieved" party for purposes of FPA section 313. The Dominion and PJM motion for leave to answer is granted, and the answer is accepted. Dominion is recognized as a party to this proceeding.

As explained in the accompanying Summary of Findings, incorporated here by reference, Sierra Club's petition for rehearing is denied.

Issued in Washington, D.C. this 6th day of November, 2017.


Rick Perry
Secretary of Energy

From: Bittner, Kathy (CONTR)
To: Jereza, Catherine
Cc: Konieczny, Katherine; Drake, Christopher; Batra, Rakesh; Rosenbaum, Matthew
Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)
Date: Monday, November 06, 2017 3:38:50 PM
Attachments: Summary of Findings Order No. 202-18-1 2017-11-3 930am.docx

Sure, here it is.

From: Jereza, Catherine
Sent: Monday, November 06, 2017 3:36 PM
To: Bittner, Kathy (CONTR)
Cc: Konieczny, Katherine ; Drake, Christopher ; Batra, Rakesh ; Rosenbaum, Matthew
Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy -- do you have the electronic version that includes John Lucas' edits? Can you send so we can make sure the right version goes out.

Once we have that, I'll be sending the email out below.

Thanks!

Katie

From: Jereza, Catherine
To: Steven.Pincus@pjm.com; craig.glazer@pjm.com; michael.regulinski@dominionenergy.com; sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org
Cc: Walker, Bruce; Hoffman, Patricia; Batra, Rakesh; Konieczny, Katherine
Subject: DOE Order 202-18-1

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Katie

From: Bittner, Kathy (CONTR)
Sent: Monday, November 06, 2017 3:07 PM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Katie and Matt,

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Let me know if you need anything else.

Thanks,

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Bittner, Kathy (CONTR)
Sent: Friday, November 03, 2017 3:31 PM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>

Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Katie and Matt,

FYI..I took the package to Exec Sec. It has cleared Exec Sec review and is with the Deputy Secretary now.

Have a great weekend.

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Jereza, Catherine

Sent: Friday, November 03, 2017 12:35 PM

To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>

Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy – I'm in my office now.

Cheers

Katie

Summary of Findings

Department of Energy Order No. 202-18-1

November 6, 2017

Section 202(c) of the Federal Power Act (FPA) (codified at 16 U.S.C. § 824a(c)), through section 301(b) of the Department of Energy Organization Act (codified at 42 U.S.C. § 7151(b)), authorizes the Secretary of Energy, upon finding “that an emergency exists by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy, or of fuel or water for generating facilities, or other causes,” to issue an order “requir[ing] . . . such temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy as in [the Secretary’s] judgment will best meet the emergency and serve the public interest.” 16 U.S.C. § 824a(c)(1). If the order “may result in a conflict with [an] environmental law or regulation,” then the Secretary must “ensure that such order requires generation, delivery, interchange, or transmission of electric energy only during hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable, is consistent with any applicable . . . environmental law or regulation and minimizes any adverse environmental impacts.” *Id.* § 824a(c)(2). Orders issued under FPA section 202(c) “that may result in a conflict with [an] environmental law or regulation” expire 90 days after they are issued, but the Secretary “may renew or reissue such order[s] . . . for subsequent periods, not to exceed 90 days for each period, as [the Secretary] determines necessary to meet the emergency and serve the public interest.” *Id.* § 824a(c)(4)(A).

Order No. 202-17-4 (the September Order), issued on September 14, 2017, authorizes the operation of coal-fired Yorktown Power Station Units 1 and 2 pursuant to section 202(c), for reliability purposes only and under strict conditions, through December 13, 2017. On October 6, 2017, Sierra Club moved to intervene and petitioned for rehearing of the September Order pursuant to FPA section 313(a), 16 U.S.C. § 825l(a).¹ *Sierra Club’s Motion Petition for Rehearing, and Motion to Intervene* (Oct. 6, 2017) (Petition). On October 20, 2017, the Department of Energy (DOE or Department) received an answer to Sierra Club’s petition from the Virginia Electric and Power Company (Dominion) and PJM Interconnection LLC (PJM). On October 23, 2017, PJM responded to a list of questions from the Department’s Office of Electricity Delivery and Energy Reliability, and further clarifications from PJM and Dominion are noted below.

¹ Issuance of today’s Order falls within the timeframe provided under FPA section 313(a). See 16 U.S.C. § 825l(a) (“Unless the [Secretary] acts upon [an] application for rehearing within thirty days after it is filed, such application may be deemed to have been denied.”); 10 C.F.R. § 205.5(a)(1); see also *Kan. Cities v. FERC*, 723 F.2d 82, 85 n.2 (D.C. Cir. 1983) (affirming the Federal Energy Regulatory Commission (FERC) regulatory interpretation of a section 313(a) deadline extension to fall on a business day).

Summary of Findings for Department of Energy Order No. 202-18-1

For the reasons discussed in this Summary of Findings, and as reflected in Order No. 202-18-1, Sierra Club's petition for rehearing is denied.

Sierra Club raises two categories of objections to the Department's compliance with FPA section 202(c):

- (1) The Department's failure to (a) properly consult with EPA under Section 202(c) and to (b) add further measures to reduce the Yorktown Units' hours of operation and emissions; and
- (2) The Department's failure to properly assess the impacts of its action under the National Environmental Policy Act and its reliance on an inapplicable categorical exclusion.

The Department's objective was, and remains, to minimize the use of either unit, in light of environmental considerations, without compromising or jeopardizing the reliability of the power grid in the North Hampton Roads area. To accomplish this, the Department must balance competing challenges to arrive at a solution that "in [the Secretary's] judgment will best meet the emergency and serve the public interest." 16 U.S.C. § 824a(c)(1).

The Department Complied with Section 202(c) of the Federal Power Act

A key component of the Sierra Club's first objection is its claim that DOE did not fulfill the statute's consultation requirement. The Sierra Club, however, misreads section 202(c), arguing for a scope and procedural complexity of consultation that is not found in the statute. In renewing or reissuing certain orders under section 202(c), the statute requires DOE to "consult with the primary Federal agency with expertise in the environmental interest protected by [a conflicting] law or regulation" and to "include in any such renewed or reissued order such conditions as such Federal agency determines necessary to minimize any adverse environmental impacts to the extent practicable." 16 U.S.C. § 824a(c)(4)(B).

In this case, DOE consulted with the relevant federal agency, the U.S. Environmental Protection Agency (EPA). Following consultation, EPA concurred in writing with the Department's approach in the September Order. EPA did not recommend or propose further conditions on matters within its purview in the September Order or indicate that additional or different consultation with EPA was desired. The FPA does not specify procedures or substantive requirements for consultation under this provision. Rather, it requires only that a consultation take place and, if the consulted agency (here, EPA) proposes additional conditions in a renewal order, that such conditions be included in the order unless DOE "determines that such condition would prevent the order from adequately addressing the emergency" and publicly explains its determination. Here, EPA recommended no additional conditions. Rather, EPA expressly acknowledged the

Summary of Findings for Department of Energy Order No. 202-18-1

September Order's consistency with EPA's April 2016 Administrative Compliance Order (ACO) and expressed no concerns about DOE's approach.

Indeed, the statute expressly recognizes that, as occurred here, the consulted agency might not propose further conditions: “[t]he conditions, *if any*, submitted by such Federal agency shall be made available to the public.” *Id.* (emphasis added). Thus, Sierra Club incorrectly reads the statute as requiring the consulted agency (*i.e.*, EPA) to verify, independently, DOE's compliance with FPA section 202(c)(2). The statute contains no such requirement or mechanism for such independent verification. Rather, FPA section 202(c)(4) provides the consulted agency the opportunity to propose conditions in a DOE order that would either supplement or substitute for conditions to be ordered by DOE and as to which DOE has discretion to accept or reject, subject to the requirement to explain its reasoning. Sierra Club incorrectly seeks to transform this consultation process from one in which an agency with specific environmental expertise advises DOE on conditions to one in which the consulted agency exercises an oversight role and must approve DOE's actions. However, Sierra Club offers no support for that interpretation, and DOE finds nothing in the text of the statute to support such an interpretation. DOE's consultation with EPA prior to issuing the September Order satisfied the statutory requirements.²

Next, Sierra Club suggests that alternative sources of power can and should replace Yorktown Units 1 and 2 generation during transmission outages or high load conditions, either of which could trigger the Remedial Action Scheme (RAS) that automatically sheds roughly 950 MW of load to prevent voltage collapse. *See Summary of Findings for Department of Energy Order No. 202-17-4*, at 4 (Sept. 14, 2017) (Summary of Findings). Notably, the Sierra Club acknowledges that the challenged September Order requires PJM and Dominion to exhaust available resources, including demand response and behind-the-meter generation resources, prior to operating Yorktown Units 1 or 2. Petition at 9-10. This reduces Sierra Club's objection to the fact that the September Order does not require the consideration of additional resources that may become available “over the course of the emergency.” *Id.* at 10. In other words, Sierra Club concedes that the Department correctly evaluated available alternatives but quibbles that the Department should have analyzed speculative new resources as well.

While the Department does not oppose the use of alternative power sources generally, it explained in the September Order that, in its judgment and based on the record before it, the available alternative power cannot fully compensate for the loss of Yorktown Units 1 and 2 generation, and would therefore not suffice to preserve the reliability of the North Hampton Roads grid:

² Informal communications with EPA staff have continued. Despite learning of the Sierra Club's arguments in the October 6 petition, EPA personnel have not expressed an intent to add conditions.

Summary of Findings for Department of Energy Order No. 202-18-1

The only sufficient alternative to the RAS and its resulting outages for up to approximately 150,000 customers is the emergency operation of Yorktown Units 1 and 2. The demand response available to PJM is a small fraction of the load threshold and is “not sufficient to ensure reliable service.” Likewise, Dominion has limited demand-side management and curtailment capabilities, insufficient for reliability purposes even when fully deployed.

Id. at 6 (citations omitted).

Both the Department’s June 2017 and September 2017 orders specifically require the minimum use of Yorktown Units 1 and 2 that preserves system reliability—and, in fact, PJM and Dominion emphasize that “[h]istory and future projections show that the need [for operation of Yorktown Units 1 and 2] is far less than full time and, in total, may only amount to 81 days over the entire 18-20 month [transmission upgrade] period.” *Motion for Leave to Answer and Answer of Virginia Electric & Power Company and PJM Interconnection LLC*, at 10 (Oct. 20, 2017) (Answer). Under section 202(c), the Department is authorized “to require by order such temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy as in [the Secretary’s] judgment will best meet the emergency and serve the public interest.” The requirement is conjunctive, not disjunctive. The Department acknowledges that minimizing the use of Yorktown Units 1 and 2, both of which were planned to be retired by now, is in the public interest, along with exploring alternative power sources. In the Secretary’s judgment, however, reliance on alternative power sources alone, such as those Sierra Club suggests, does not best meet the emergency. The public interest is not served by the RAS being needlessly activated and power being shut off to 150,000 customers—and hundreds of thousands of people—which would be the result of insufficient generation during a transmission outage.

In assessing the need for an emergency order under section 202(c), the Department independently evaluates the situation, but it is not required to determine every reasonable alternative. The statute requires only that the Secretary use his or her best judgment to meet the emergency and serve the public interest. That judgment includes the determination of which factors play a central role in a given emergency and the weight to assign each such factor. In this situation, the expertise of the applicant was an important factor. The Department received an application from PJM, which is not only the regional transmission organization responsible for managing a transmission system across twelve states and the District of Columbia, but also holds the highest-level, federally-regulated reliability responsibilities for the system it manages. Summary of Findings at 2. The Department’s independent analysis of PJM’s request took into account the extensive earlier reviews conducted by PJM in evaluating the proposed solution. *Id.* at 2-3. Although DOE is not obligated to analyze the viability of alternative resources (especially at the unit level, which is an unbounded analysis if DOE were to consider potential new resources), the

Summary of Findings for Department of Energy Order No. 202-18-1

following analysis broadly explains the rationale behind dispatching Yorktown Units 1 and 2 instead of other categories of alternative resources.

The alternatives Sierra Club presents for consideration (namely expanded demand response and distributed generation resources as well as battery storage) do not best meet the emergency because, unlike Yorktown Units 1 and 2, they cannot guarantee enough dispatchable power, both real³ and reactive,⁴ during excessive load periods or transmission outages. Reliance on alternatives to Yorktown Units 1 and 2 would require both real and reactive power supply, and achieving that over the anticipated remaining emergency timeframe⁵ is infeasible due to a combination of technical and market challenges. The precise amount of dispatchable power needed to replace Yorktown Units 1 and 2 varies based on a combination of the system configuration (e.g., whether any other facilities are offline) and load. The Department's analysis reasonably focused on the worst-case scenario, which would draw on the full output of both Units 1 and 2, or 270 MW (net), and also have the option of providing reactive power support. The combined capacity of all currently-available alternatives does not reach 270 MW (net), and the Department explains below why those alternative resources, even if combined, are unlikely to become sufficient substitutes over the remaining emergency timeframe.

First, relying on available demand response is inadequate because it cannot provide sufficient reactive power support.⁶ Demand response is only a load reduction measure. Both real power and reactive power are critical to maintaining system reliability, and while demand response decreases both real power demand and reactive power demand, it does not generate power. The available demand response resources are few in number, and there is no indication in the record that market incentives could substantially and rapidly increase demand response over the anticipated emergency timeframe. PJM reports that it

³ The North American Electric Reliability Corporation (NERC) Glossary, as adopted by the NERC Board of Trustees, defines "real power" as "[t]he portion of electricity that supplies energy to the Load" — that is, to customers. Glossary of Terms Used in NERC Reliability Standards (updated Oct. 6, 2017), http://www.nerc.com/files/glossary_of_terms.pdf.

⁴ The NERC Glossary defines "reactive power" as "[t]he portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive Power must be supplied to most types of magnetic equipment, such as motors and transformers. It also must supply the reactive losses on transmission facilities. Reactive Power is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is usually expressed in kilovars (kvar) or megavars (Mvar)." *Id.*

⁵ This analysis applies to both the 90-day term of Order No. 202-17-4 and the estimated remaining time for the Skiffes Creek Transmission Project. The latter is expected to take 18-20 months. Four months have passed since construction commenced.

⁶ When load is reduced, the requisite reactive power required by the system is proportionally reduced. DOE does not treat that as reactive power support akin to the ancillary services provided by Yorktown Units 1 and 2, however, because demand response merely removes the need for some reactive power support rather than actively providing it.

Summary of Findings for Department of Energy Order No. 202-18-1

has approximately 26 MW of demand response available during the 2017/2018 Planning Year, but just 0.7 MW of demand response resources are available year-round. Email from S. Pincus to R. Batra (Oct. 23, 2017), included in the docket of this Order.⁷ Additionally, Dominion reports that it has roughly 20 MW of Demand Side Management capability—specifically, remote air conditioning control, limited to a total of 120 hours and 30 days during the summer months. *Id.* Dominion also can curtail a large industrial customer by an average of 75 MW for transmission emergencies, but this curtailment is available only when the customer's load is about 99 MW, so that the reduced customer load is not more than 24 MW. *Id.* Even during the summer of 2017, the customer's load averaged 40 MW, well below the threshold for load curtailment. *Id.* Demand response is a voluntary program that even participating customers can decline to follow (at risk of contractual penalties). As such, PJM or Dominion cannot guarantee load reduction from demand response. Even if demand response were compulsory, it cannot provide reactive power benefits equivalent to generation units. For all of these reasons, reliance on demand response is not a workable solution to the reliability concerns at issue.

Second, distributed energy resources, such as rooftop solar and other behind-the-meter generation, also are insufficient to address the reliability concerns. Like demand response, behind-the-meter generation reduces the load a utility serves. But unlike demand response, distributed energy resources have the potential of adding supply to the system. This benefit is reduced, however, by two issues: (1) distributed energy resources are not assured because their availability depends on variable factors, such as solar radiation; and (2) reactive power support from distributed energy resources cannot be aggregated in a linear fashion, making its benefits too geographically constrained to be useful across the same area served by Yorktown Units 1 and 2. Distributed energy resources or behind-the-meter programs are also voluntary. Hence, customers cannot be compelled to install or use behind-the-meter generation. Current available resources are insufficient,⁸ and fundamental questions about how to fairly compensate owners likely preclude substantial shifts in this resource over the anticipated emergency timeframe.⁹ Thus, relying on

⁷ The annual availability schedule is as follows: 0.7 MW from January through April, 11 MW in May, 25.5 MW from June through September, 11 MW in October, and 0.7 MW from November to December.

⁸ PJM's forecast for distributed solar generation across the entire Dominion zone—not the smaller North Hampton Roads area—is 130MW (real power) at typical peaking conditions. Email from S. Pincus to R. Batra (Oct. 23, 2017). In weather patterns unfavorable to solar power generation, that number could drop to zero.

⁹ Earlier this year, FERC outlined the challenges in pricing sales of distributed energy back to the grid. *See* Policy Statement, Utilization of Electric Storage Resources for Multiple Services When Receiving Cost-Based Rate Recovery, 158 FERC ¶ 61,051 (Jan. 19, 2017). An “electric storage resource” is “a resource capable of receiving electric energy from the grid and storing it for later injection of electricity back to the grid.” *Indianapolis Power & Light Co. v. Midcontinent Indep. Sys. Operator, Inc.*, 158 FERC ¶ 61,107 at P 6 n.14 (Feb. 1, 2017). That definition “include[s] all types of electric storage technologies, regardless of their size, storage medium (e.g., batteries, flywheels, pumped-hydro), or whether located on the interstate grid or on a distribution system.” *Id.*

Summary of Findings for Department of Energy Order No. 202-18-1

variable or intermittent resources for reactive power is not a solution to reliability concerns.

Finally, rechargeable battery storage, even if technically feasible,¹⁰ is not a viable solution because it would require a substantial financial outlay for long-life equipment to address a short-term problem that could be resolved in as little as 14 months when the Skiffes Creek Transmission Project comes online. To serve as an alternative to Yorktown Units 1 and 2, PJM and Dominion would have to procure enough battery storage to be on par with those units.¹¹ Insufficient battery storage would lead to the RAS being triggered, automatically shedding 950 MW of load. Suggesting that battery storage is a workable solution, Sierra Club's expert noted three recent examples: (1) a 20 MW, four-hour battery storage system; (2) a pair of four-MWh batteries, and (3) a 100 MW rechargeable storage system. *See* Sierra Club Exhibit F at 18-19. In this case, Dominion would need to procure approximately 270 MW (net) of battery storage to replace the output of Yorktown Units 1 and 2 adequately and reliably. Doing so would come at a high cost to ratepayers without a proven benefit if the full 270 MW is not required during the anticipated emergency timeframe.

Under Sierra Club's first example, Southern California Edison (SCE) recently procured four hours of 20 MW (80MWh) energy storage from Canada's AltaGas Ltd.¹² The Pomona Energy Storage Facility, built to house the batteries and inverters, was completed in under four months and came online in December 2016.¹³ The project, with its 80 MWh of discharge capacity, cost between \$40 million and \$45 million.¹⁴ Scaling those figures up for a rough estimate, a similar storage facility capable of 270 MW (net) output for four hours could cost approximately \$540 million to \$600 million. The cost of Tesla's project in South Australia, noted by Sierra Club as its third example, is estimated to be \$576 to \$730 per kilowatt,¹⁵ which roughly equates to between \$622 million and \$788

¹⁰ Unlike demand response or behind-the-meter generation, PJM and Dominion could deploy battery storage that could be available without contingencies, and some portion of direct-current battery output could be converted for reactive power support.

¹¹ Although it would be theoretically possible to deploy a combination of the alternative resources proposed by Sierra Club such that the required amount of battery storage could be reduced, it was the Department's judgment that, due to the minimal amount of demand response and behind-the-meter resources available, modeling combination scenarios would not serve to further inform DOE's review.

¹² <https://www.altagas.ca/sites/default/files/2017-02/Pomona%20Energy%20Storage%20brochure.pdf>.

¹³ *Id.*

¹⁴ *Id.*; <http://www.reuters.com/article/idUSFWN1AX0G9>.

¹⁵ <https://www.reuters.com/article/us-australia-power-tesla/teslas-big-battery-races-to-keep-south-australias-lights-on-idUSKCN1C40DD>. The costs described in Australian dollars (\$750 to \$950) were converted to U.S. dollars in this document using a market-closing exchange rate of 0.7687 U.S. dollars to 1 Australian dollar, as reported by the Wall Street Journal on Monday, October 30, 2017. *See* http://www.wsj.com/mdc/public/page/2_3021-forex.html.

million for the 270 MW, four-hour storage system contemplated earlier. Costs are highly variable and depend on procurement contract negotiations. But they would run into the hundreds of millions of dollars, and ratepayers would absorb a significant portion of those charges.¹⁶ The examples Sierra Club's expert mentions address different situations, as it appears the battery storage systems were purchased consistent with overall system planning goals, as opposed to the situation here that would add a costly new resource to an existing system as a short-term fix while longer-term solutions were constructed. In short, none of the examples presented is applicable to the reliability situation faced here. While battery storage has improved markedly, it is not a workable solution to the substantial reliability concerns the Department has addressed in this particular geographic area.

Using Yorktown Unit 3 to alleviate the emergency is PJM and Dominion's only remaining option, and its operating constraints prevent it from addressing the emergency. Unit 3 is oil-fired and has a maximum real output of 789 MW, but it is unreliable and can only operate at an 8 percent capacity factor (63 MW) to comply with EPA's Mercury and Air Toxics Standards (MATS). PJM Application (June 13, 2017) at 18; Email from S. Pincus to R. Batra (Oct. 23, 2017); Email from M. Regulinski to R. Batra (Nov. 2, 2017), included in the docket of this Order. Dominion has stated at least five significant reasons for its concerns about Unit 3: structural duct work and damper repairs, turbine inspections and repairs, waterbox repairs, turbine valve work and repairs, and various boiler tube leaks. *See id.* Apart from power output that is only a fraction of what Units 1 and 2 can produce, Unit 3 is so unreliable that Dominion has only operated it for 54 days in the past three (3) years. *See Yorktown Unit 3 Days of Operation 2014-2016*, included in the docket of this Order. Unit 3 is not a viable alternative due to limitations that prevent PJM from relying on that unit consistently and for an extended period of time.

Unlike the Sierra Club's proposed alternatives, either individually or in the aggregate, the Yorktown coal units can resolve the reliability emergency. They provide both real power and reactive power support, without contingencies, and at the levels required. Without the Yorktown Units, PJM cannot ensure the reliability of the grid in the North Hampton Roads area throughout the transmission upgrade schedule. For that reason, the authorization of the Yorktown Units to operate for reliability purposes only, despite being less than ideal, remains the *best* available option to meet the identified emergency.

¹⁶ For example, although SCE and Tesla did not disclose the contract price for Tesla's storage units at SCE's Mira Loma substation, SCE filed a rate case with the California Public Utilities Commission on March 30, 2017, seeking in part to recover costs of those facilities from its ratepayers. *See Application of Southern California Edison Company (U 338-E) for Recovery of Aliso Canyon Utility Owned Energy Storage Costs* (Mar. 30, 2017), [http://www3.sce.com/sscc/law/dis/dbattach5e.nsf/0/FE377273FDBE2408882580F3007B32BE/\\$FILE/A1703XXX-SCE%20Application%20for%20Cost%20Recovery%20of%20ACES%20UOS.pdf](http://www3.sce.com/sscc/law/dis/dbattach5e.nsf/0/FE377273FDBE2408882580F3007B32BE/$FILE/A1703XXX-SCE%20Application%20for%20Cost%20Recovery%20of%20ACES%20UOS.pdf).

Summary of Findings for Department of Energy Order No. 202-18-1

Sierra Club's reference to the 2005 Mirant 202(c) order, for the proposition that the Department can and should require ordered entities to obtain alternative energy sources during the period of an emergency, is misplaced. Specifically, Sierra Club cites the following discussion in Order No. 202-05-3 (the Mirant Order): "DOE expects that the DCPSC, having sought an emergency order, will take such actions as are within its authority to provide adequate and reliable electric service for the Central D.C. area including, for example, expediting approval of PEPCO transmission system upgrades and instituting demand response programs." Order No. 202-05-3, at 9 (Dec. 20, 2005), https://energy.gov/sites/prod/files/oeprod/DocumentsandMedia/mirant_122005_2.pdf. However, at least two key differences distinguish the September Order from the Mirant Order. First, Dominion already has a demand response program. As explained above, Dominion's demand response program cannot ensure reliability on the North Hampton Roads power grid during a transmission outage. Second, the Mirant Order urged the D.C. Public Service Commission to "take all reasonable actions." Again as explained above, even if each of Sierra Club's alternatives were viewed as reasonable, the alternatives are inadequate to solve the reliability emergency on their own.

A determination not to order Yorktown Units 1 and 2 to operate could result in severe collateral effects—namely, load shedding across the North Hampton Roads area. Power would be shut off to thousands of customers, which could impact over half a million people.¹⁷ Because the RAS is activated when load reaches a critical threshold, whether that threshold is triggered by a transmission outage or by heightened power demand, the full load is shed immediately. That is, the shedding is not piecemeal—950 MW of power immediately go off-line upon activation of the RAS. Without sufficient backup generation, the risk of load shedding pursuant to the RAS is far greater. While the September Order is directed at avoiding the emergency presented by that loss of power, it also takes into account the Department's independent analysis of the reliability situation in the North Hampton Roads area and an evaluation of proposed alternatives.¹⁸ Without an emergency order the region may suffer heavy load shedding, and the Department has determined to protect the public interest by exercising its authority to avoid the loss of power that otherwise would result.

¹⁷ See Summary of Findings at 4 (noting that the North Hampton Roads area population exceeded 660,000 in July 2016, according to U.S. Census estimates).

¹⁸ In light of a permanent solution coming online soon, this analysis did not model all permutations of alternative resources; instead, in the Department's judgment, an examination of whether there were any realistic substitute resources during the anticipated emergency timeframe was conducted.

The Department Complied With Its Environmental Review Obligations

Sierra Club also contends that the Department did not adequately assess the impact of its Order under the National Environmental Policy Act (NEPA), 42 U.S.C. 4321 *et seq.* NEPA requires federal agencies to consider the potential environmental impacts of their proposed actions before taking action. The regulations of the Council on Environmental Quality (CEQ) implementing NEPA, codified at 40 C.F.R. parts 1500–1508, establish three levels of review for proposed actions subject to NEPA: categorical exclusion (CX) determinations,¹⁹ environmental assessments (EA),²⁰ and environmental impact statements (EIS).²¹ In this instance, Sierra Club highlights the issuance of the September Order as the underlying action subject to NEPA review. The Department acted consistently with NEPA by issuing a CX determination, which is based on its assessment of the proposed action and determination that it fits within a category of actions previously established by the Department and found not to have a significant impact, individually or cumulatively, on the environment. *See* Record of Categorical Exclusion Determination issued on September 11, 2017.

Specifically, the proposed action fits within the CX for power marketing services and power management activities. That CX covers “[p]ower marketing services and power management activities (including, but not limited to, storage, load shaping and balancing, seasonal exchanges, and other similar activities), provided that the operations of generating projects would remain within normal operating limits.” *See* 10 C.F.R. Part 1021, Subpart D, Appendix B, B4.4.²² The September Order requires Dominion to “operate Units 1 and/or 2 of the Yorktown Power Station as directed by PJM only as needed to address reliability issues.” September Order at 2. Such operation fits squarely within the power management activities of load shaping and balancing that are included in B4.4.²³ Sierra Club does not dispute that the September Order authorizes covered power management activities. Instead, Sierra Club argues that the authorized operations would not be “within normal operating limits.” Petition at 7.

¹⁹ A CX is a category of actions that a federal agency has determined do not individually or cumulatively have a significant impact on the environment and for which, therefore, neither an environmental assessment nor an environmental impact statement is normally required. *See* 40 C.F.R. § 1508.4.

²⁰ An EA is a relatively brief analysis conducted to determine whether a proposed action may have a significant impact on the environment and, thus, whether an EIS is required. *See id.* § 1508.9.

²¹ An EIS is a detailed analysis of the potential environmental impacts of a proposed action (and alternatives) that may have a significant impact on the environment. *See id.* § 1508.11.

²² This CX was revised during a 2011 DOE rulemaking, in part, to make clear that it applies to power management activities, including those evaluated or overseen, even if not directly undertaken, by the Department. *See* 76 Fed. Reg. 214, 227 (Jan. 3, 2011).

²³ “Balancing” was added to “load shaping” in B4.4 during the rulemaking to make clear that the CX is intended to cover load balancing which “helps ensure system reliability by managing energy resources to be equal with load.” 76 Fed. Reg. 63,764, 63,777 (Oct. 13, 2011).

Summary of Findings for Department of Energy Order No. 202-18-1

Sierra Club's argument rests on its mistaken interpretation that "normal operating limits" refers to compliance with environmental standards, including MATS. *Id.* Rather, "normal operating limits" refers to elements of power generation capacity, not permit or other regulatory limits.

First, the Sierra Club's interpretation fails to account for the words "would remain" that precede "within normal operating limits" in the CX. "Would remain" provides important context, demonstrating that the CX contemplates the proposed operation being evaluated against the current operation to see if the operations will be consistent, *i.e.*, "would remain within normal operating limits." Sierra Club's interpretation would require one to evaluate the proposed operation against other operating units, reading the words "would remain" out of the regulation. As such, Sierra Club's interpretation of the CX is erroneous and conflicts with the regulatory text.

Second, Sierra Club offers no authority in support of its interpretation. As explained below, the CX refers to "normal operating limits," which DOE interprets to refer to elements of power generation capacity, not permit or other regulatory limits, such as Clean Air Act emissions limits as Sierra Club contends. The text of the regulation and industry practice both amply support the Department's interpretation of its own CX. Moreover, the Supreme Court has explained that "[w]hen an agency interprets its own regulation, the Court, as a general rule, defers to it unless that interpretation is plainly erroneous or inconsistent with the regulation." *Decker v. Nw. Envtl. Def. Ctr.*, 568 U.S. 597, 613 (2013) (internal quotation marks omitted) (citing *Chase Bank USA, N.A. v. McCoy*, 562 U.S. 195, 208 (2011) (quoting *Auer v. Robbins*, 519 U.S. 452, 461 (1997))).

In its CX determinations for these orders, the Department interpreted the language "would remain within normal operating limits" to mean that operations would remain within normal *operational* capacities and limits. *See* CX determinations for the June and September Orders; *see also* CX Determination for Order No. 202-17-1 (Categorical Exclusion Determination, Grand River Dam Authority).²⁴ The operational capacities for Units 1 and 2 are reflected in their maximum real outputs of 159 MW and 164 MW

²⁴ The Department's establishment of other CXs related to electrical power and transmission supports its interpretation that normal operating limits relates to operational capacity. For example, for some actions, the Department has established corollary categories of actions that typically require a CX, EA, or EIS. *See, e.g.*, the CX at B4.1, which covers certain electric power acquisitions involving "existing generation resources operating within their normal operating limits." 10 C.F.R. Part 1021, Subpart D, Appendix B. The EA corollary for this CX is C7, which applies, in part, to "changes in the normal operating limits of generation resources equal to or less than 50 average megawatts," and the D7 EIS corollary, which applies to "changes in the normal operating limits of generation resources greater than 50 average megawatts." *Id.* It is clear from the focus on MWs in these provisions that the term "normal operating limits" refers to operational capacity.

Summary of Findings for Department of Energy Order No. 202-18-1

respectively, with a net output²⁵ from each unit of 135 MW. *See* PJM Application (June 13, 2017) at 5; Email from M. Regulinski to R. Batra (Sept. 5, 2017); Email from M. Regulinski to R. Batra (Oct. 27, 2017). The maximum real outputs represent the high end of the operating parameters for these units. The objective is to operate the units consistent with these outputs; such operation is consistent with the prescribed normal operating limits.²⁶ The Department's determination that the units will remain within normal operating limits is supported by the record. As evidenced by the operational data provided to date for operations under the June and September Orders, these units have remained within their maximum real output limits. *See* Renewal Application, Attachment 1; Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4 (Sept. 28, 2017), Attachments 1, 3, and 5. Pursuant to the September Order, these units will remain within their operational capacities and are expected to operate below their capacity given the restrictions provided in the September Order (*i.e.*, operate as directed by PJM only as needed to address reliability issues and exhaust all reasonably and practically available resources prior to operating). In fact, the units are anticipated to run only 81 days over the 18-20 month construction period, Answer at 10, which is 81 out of 540-600 days or 13-15% of the time.

Third, DOE's interpretation is consistent with the common understanding of the term "operating limits" in the technical community and in the context of the power generation facilities at issue. For example, NERC defines "equipment rating" to mean "[t]he maximum and minimum voltage, current, frequency, real and reactive power flows on individual equipment under steady state, short-circuit and transient conditions, as permitted or assigned by the equipment owner." Glossary of Terms Used in NERC Reliability Standards (updated Oct. 6, 2017), http://www.nerc.com/files/glossary_of_terms.pdf. NERC defines "normal rating" as "[t]he rating as defined by the equipment owner that specifies the level of electrical loading, usually expressed in megawatts (MW) or other appropriate units that a system, facility, or element can support or withstand through the daily demand cycles without loss of equipment life." *Id.*

In the alternative, even under Sierra Club's proffered interpretation that the phrase "normal operating limits" includes considerations beyond operational capacity, such as Clean Air Act emissions requirements, the September Order and operation of Units 1 and 2 pursuant to that Order would meet the parameters of B4.4. Sierra Club argues that the operation of these units will not be within normal operating limits because such operation would not be in compliance with MATS. *See* Petition at 7. However, as Sierra Club acknowledges, these units are proposed for deactivation because they are not, and never

²⁵ The net MW output is "the gross output of the units reduced by station auxiliary power, which is the power needed to operate the station itself and the generation units." Email from M. Regulinski to R. Batra (Oct. 27, 2017).

²⁶ While it is possible for a unit to exceed its maximum real outputs, doing so is ill-advised, as it could result in overheating, equipment damage, inefficiencies, and a shortened operational life of the unit.

Summary of Findings for Department of Energy Order No. 202-18-1

have been, in compliance with MATS. *See id.* Accepting *arguendo* Sierra Club's interpretation that the phrase "normal operating limits" under which Units 1 and 2 "would remain" refers to how the units have operated in relation to MATS compliance, then it follows that "normal operation" of these particular units is non-compliance. In other words, under this reading of the regulation, "normal operating limits" and MATS non-compliance would be co-extensive.

The MATS took effect in April 2012. *See* 77 Fed. Reg. 9304 (Feb. 16, 2012). Section 112(i)(3)(A) of the Clean Air Act allowed existing power plants three years—*i.e.*, until April 2015—to comply with MATS. *See* 42 U.S.C. § 7412(i)(3)(A). During these three years, Yorktown Units 1 and 2 were not operating in compliance with MATS. Section 112(i)(3)(B) of the Clean Air Act further allowed for a one-year extension of compliance until April 2016. *See id.* § 7412(i)(3)(B). Dominion sought and received this compliance extension from the Virginia Department of Environmental Quality (VADEQ). Thereafter, Dominion sought and received an ACO from EPA. *See* AED-CAA-113(a)-2016-0005. The ACO allowed the Yorktown Units 1 and 2 to operate, under certain conditions, through April 15, 2017. *See id.* at 8. In the five and a half years since the MATS took effect, the Yorktown units have never been equipped to comply with MATS. Nevertheless, they have operated, and for five of those years, they were operating pursuant to allowances in the Clean Air Act. The Department's Orders allow for continued conditional operation, incorporating conditions contained in EPA's ACO, consistent with how these units have operated (as relates to MATS) for years.

In addition to the applicability of the B4.4 CX, Sierra Club argues that the June Order and the September Order are major federal actions significantly affecting the environment. *See* Petition at 6. Sierra Club points to the mercury and hydrogen chloride (HCl) per-pound emissions estimates (3.3068 lbs./TBtu and 0.0478 lbs./MMBtu, respectively)²⁷ that were provided by PJM in its Renewal Application and notes that these estimated emissions exceed the MATS for these two pollutants. *See id.*; Renewal Application, Attachment 2. First, these per pound emissions estimates are based on emissions factors, and the projected monthly emissions provided by PJM are based on conservative operational assumptions and are intended to be bounding. For example, PJM's monthly emissions estimates are based on its expectations that there will be a total of 81 days over load thresholds that will necessitate operation of Units 1 and/or 2. *See* Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4 (Sept. 28, 2017), Attachment 4. The monthly emissions estimates "are based on full operating days" and conservatively assume an operating day consists of "24 hours of operation, 16 hours at low load and 8 hours at maximum load." Report on Yorktown Units 1 and 2 Operations

²⁷ PJM's per pound emissions estimates for mercury and HCl are based on emissions factors from AP-42, Fifth Edition. *See* Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-2 (Aug. 24, 2017) at 4. Mercury emissions were based on AP-42, Table 1.1-18 and HCl was based on AP-42, Table 1.1-15. *See id.*

Summary of Findings for Department of Energy Order No. 202-18-1

Pursuant to Order No. 202-17-2 (Aug. 24, 2017) at 4. Second, in order to minimize emissions, the Secretary included conditions in the September Order to minimize the impacts from operation of Yorktown Units 1 and 2. As such, there is no indication that the emissions estimated by PJM will necessarily be reached.

Moreover, DOE consulted with EPA about the September Order, and EPA had the opportunity to suggest additional conditions it determined “necessary to minimize any adverse environmental impacts to the extent practicable.” 16 U.S.C. § 824a(c)(4)(B). EPA did not suggest additional conditions or indicate concerns with DOE’s approach. *See* Email from L. Starfield to P. Hoffman (Sept. 11, 2017), available at <https://energy.gov/oe/downloads/additional-documents-order-no-202-17-4>.

Nevertheless, there is a reasonable expectation that some emissions could exceed the MATS. Yorktown Units 1 and 2 are not equipped to be MATS compliant. As all parties have acknowledged, that is the reason Dominion seeks to retire the units and why it sought and was granted compliance extensions from VADEQ and EPA, and in part, why the September Order²⁸ was requested.

After stating the per pound emissions estimates, Sierra Club then cites to PJM’s estimates for total emissions of mercury and HCl over the projected 18-20 month period and concludes, without any supporting analysis related to the operation of Units 1 and 2, that “[t]hose emissions will have a significant impact.” Petition at 6. DOE assessed the constrained operation allowed under the September Order and determined that the constraints were consistent with those previously imposed by EPA in the ACO, and that such operations would not result in significant impacts. Sierra Club cites to selective parts of EPA’s May 2011 proposed rulemaking related to National Emissions Standards for Hazardous Air Pollutants and Standards of Performance which are inapposite to the Order,²⁹ and states that mercury is hazardous even in small quantities and that HCl can cause acute and chronic health harms. *See id.* Also, as an attachment to its Petition, Sierra Club includes a 2011 EPA memorandum related to a non-Hg case study of chronic

²⁸ “[A]ction taken by a party, that is necessary to comply with an order issued under this subsection” which “results in non-compliance with . . . any Federal, State, or local environmental law or regulation . . . shall not be considered a violation . . . or subject such party to any requirement, civil or criminal liability, or a citizen suit.” 16 U.S.C. § 824a(c)(3).

²⁹ For example, Sierra Club notes a dose of .0001mg/kg-day for mercury and states that exposures above that level raise health concerns. *See* Petition at 6. This dose is the “reference dose” (RfD) for methyl mercury, which was described during the rulemaking as “the amount of a chemical which, when ingested daily over a lifetime, is anticipated to be without adverse health effects to humans, including sensitive subpopulations.” 76 Fed. Reg. 24,976, 24,982 (May 3, 2011). The rulemaking further described the RfD as “an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily exposure . . . that is likely to be without an appreciable risk of deleterious effects during a lifetime.” *Id.* at 25,000. This scenario plainly does not reflect expected exposure based on operations under the September Order. The operations of Units 1 & 2 will be limited to generation needed to meet grid reliability, and will be of a limited 18-20 month duration.

Summary of Findings for Department of Energy Order No. 202-18-1

inhalation risks that does not correlate to the emissions or potential exposures related to the September Order.³⁰ *See* Petition at 6; EPA Memorandum (Mar. 16, 2011) attached to Petition. Yet, Sierra Club has provided no applicable data or analysis in support of this claim, and therefore has failed to demonstrate significant impacts from the subject Order.

Finally, Sierra Club notes that CEQ has NEPA procedures that are applicable in emergency situations. *See* Petition at 8. The Department agrees that § 1506.11 provides that “[w]here emergency circumstances make it necessary to take an action with significant environmental impact without observing the provisions of these regulations, the federal agency taking the action should consult with the Council about alternative arrangements.” As explained above, the Department concluded that issuance of the September Order would not result in significant environmental impacts. Therefore, alternative arrangements and consultation were not required. In this case, the Department has chosen to proceed consistently with one of the established levels of NEPA review: issuance of a CX determination.³¹

Sierra Club concludes by stating that the extended nature of the situation provides time for DOE to conduct additional NEPA review and to inform subsequent renewals. *See* Petition at 9-10. As detailed above, the Department has complied with NEPA by issuing a CX determination. Nevertheless, the Department will evaluate any future renewal applications from PJM and assess the appropriate level of NEPA review based on the facts presented at that time.

Conclusion

When emergency situations arise, it is critical to have the tools to respond to them quickly, efficiently, and effectively. The Department issued the September Order because, in the Secretary’s judgment, its provisions would best meet the emergency and serve the public interest in the North Hampton Roads area. The operative interest is in keeping the lights on, allowing the PJM-mandated transmission upgrades to continue, while to the maximum extent practicable remaining consistent with environmental law and minimizing the adverse effects of power generation on human health and the environment. The September Order is tailored to accomplish those goals. Accordingly, Sierra Club’s petition for rehearing is denied.

³⁰ Sierra Club cites this inapposite study because it references the Yorktown facility. The study was actually based on 5-year concentrations for pollutants that were calculated based on information from 2005-2009, and the maximum individual risk for each facility was calculated based on “risk associated with a continuous lifetime (24 hours per day, 7 days per week, and 52 weeks per year for a 70-year period) exposure to the maximum concentration.” EPA Memorandum at 12.

³¹ Sierra Club incorporates by reference Section IV.C of its original Petition. *See* Petition at 8 n.5. The substantive arguments raised therein have been addressed above.

From: [Konieczny, Katherine](#)
To: [Bittner, Kathy \(CONTR\)](#); [Jereza, Catherine](#)
Cc: [Drake, Christopher](#); [Batra, Rakesh](#); [Rosenbaum, Matthew](#)
Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)
Date: Monday, November 06, 2017 3:50:55 PM
Attachments: [Summary of Findings Order No. 202-18-1.pdf](#)

Looks like the right one. Attached as pdf with name omitting the date/time. I also added one email address to the draft notification email below. Kevin Finto is outside counsel to Dominion and he signed Dominion's last filing.

-Kathy K

From: Bittner, Kathy (CONTR)
Sent: Monday, November 06, 2017 3:39 PM
To: Jereza, Catherine
Cc: Konieczny, Katherine ; Drake, Christopher ; Batra, Rakesh ; Rosenbaum, Matthew
Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)
 Sure, here it is.

From: Jereza, Catherine
Sent: Monday, November 06, 2017 3:36 PM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>
Cc: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)
 Hi Kathy – do you have the electronic version that includes John Lucas' edits? Can you send so we can make sure the right version goes out.
 Once we have that, I'll be sending the email out below.

Thanks!

Katie

From: Jereza, Catherine
To: Steven.Pincus@pjm.com; craig.glazer@pjm.com; michael.regulinski@dominionenergy.com; sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com

Cc: Walker, Bruce; Hoffman, Patricia; Batra, Rakesh; Konieczny, Katherine

Subject: DOE Order 202-18-1

Good evening,

Today the Secretary of Energy issued Order No. 202-18-1. The Order and Summary of Findings are attached.

Regards,

Katie

From: Bittner, Kathy (CONTR)
Sent: Monday, November 06, 2017 3:07 PM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)
 Hi Katie and Matt,

Just wanted to make sure that you are aware that the order was signed (see attached).

Let me know if you need anything else.

Thanks,

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Bittner, Kathy (CONTR)

Sent: Friday, November 03, 2017 3:31 PM

To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>

Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Katie and Matt,

FYI..I took the package to Exec Sec. It has cleared Exec Sec review and is with the Deputy Secretary now.

Have a great weekend.

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Jereza, Catherine

Sent: Friday, November 03, 2017 12:35 PM

To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>

Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy – I'm in my office now.

Cheers

Katie

Summary of Findings

Department of Energy Order No. 202-18-1

November 6, 2017

Section 202(c) of the Federal Power Act (FPA) (codified at 16 U.S.C. § 824a(c)), through section 301(b) of the Department of Energy Organization Act (codified at 42 U.S.C. § 7151(b)), authorizes the Secretary of Energy, upon finding “that an emergency exists by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy, or of fuel or water for generating facilities, or other causes,” to issue an order “requir[ing] . . . such temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy as in [the Secretary’s] judgment will best meet the emergency and serve the public interest.” 16 U.S.C. § 824a(c)(1). If the order “may result in a conflict with [an] environmental law or regulation,” then the Secretary must “ensure that such order requires generation, delivery, interchange, or transmission of electric energy only during hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable, is consistent with any applicable . . . environmental law or regulation and minimizes any adverse environmental impacts.” *Id.* § 824a(c)(2). Orders issued under FPA section 202(c) “that may result in a conflict with [an] environmental law or regulation” expire 90 days after they are issued, but the Secretary “may renew or reissue such order[s] . . . for subsequent periods, not to exceed 90 days for each period, as [the Secretary] determines necessary to meet the emergency and serve the public interest.” *Id.* § 824a(c)(4)(A).

Order No. 202-17-4 (the September Order), issued on September 14, 2017, authorizes the operation of coal-fired Yorktown Power Station Units 1 and 2 pursuant to section 202(c), for reliability purposes only and under strict conditions, through December 13, 2017. On October 6, 2017, Sierra Club moved to intervene and petitioned for rehearing of the September Order pursuant to FPA section 313(a), 16 U.S.C. § 825l(a).¹ *Sierra Club’s Motion Petition for Rehearing, and Motion to Intervene* (Oct. 6, 2017) (Petition). On October 20, 2017, the Department of Energy (DOE or Department) received an answer to Sierra Club’s petition from the Virginia Electric and Power Company (Dominion) and PJM Interconnection LLC (PJM). On October 23, 2017, PJM responded to a list of questions from the Department’s Office of Electricity Delivery and Energy Reliability, and further clarifications from PJM and Dominion are noted below.

¹ Issuance of today’s Order falls within the timeframe provided under FPA section 313(a). *See* 16 U.S.C. § 825l(a) (“Unless the [Secretary] acts upon [an] application for rehearing within thirty days after it is filed, such application may be deemed to have been denied.”); 10 C.F.R. § 205.5(a)(1); *see also Kan. Cities v. FERC*, 723 F.2d 82, 85 n.2 (D.C. Cir. 1983) (affirming the Federal Energy Regulatory Commission (FERC) regulatory interpretation of a section 313(a) deadline extension to fall on a business day).

Summary of Findings for Department of Energy Order No. 202-18-1

For the reasons discussed in this Summary of Findings, and as reflected in Order No. 202-18-1, Sierra Club's petition for rehearing is denied.

Sierra Club raises two categories of objections to the Department's compliance with FPA section 202(c):

- (1) The Department's failure to (a) properly consult with EPA under Section 202(c) and to (b) add further measures to reduce the Yorktown Units' hours of operation and emissions; and
- (2) The Department's failure to properly assess the impacts of its action under the National Environmental Policy Act and its reliance on an inapplicable categorical exclusion.

The Department's objective was, and remains, to minimize the use of either unit, in light of environmental considerations, without compromising or jeopardizing the reliability of the power grid in the North Hampton Roads area. To accomplish this, the Department must balance competing challenges to arrive at a solution that "in [the Secretary's] judgment will best meet the emergency and serve the public interest." 16 U.S.C. § 824a(c)(1).

The Department Complied with Section 202(c) of the Federal Power Act

A key component of the Sierra Club's first objection is its claim that DOE did not fulfill the statute's consultation requirement. The Sierra Club, however, misreads section 202(c), arguing for a scope and procedural complexity of consultation that is not found in the statute. In renewing or reissuing certain orders under section 202(c), the statute requires DOE to "consult with the primary Federal agency with expertise in the environmental interest protected by [a conflicting] law or regulation" and to "include in any such renewed or reissued order such conditions as such Federal agency determines necessary to minimize any adverse environmental impacts to the extent practicable." 16 U.S.C. § 824a(c)(4)(B).

In this case, DOE consulted with the relevant federal agency, the U.S. Environmental Protection Agency (EPA). Following consultation, EPA concurred in writing with the Department's approach in the September Order. EPA did not recommend or propose further conditions on matters within its purview in the September Order or indicate that additional or different consultation with EPA was desired. The FPA does not specify procedures or substantive requirements for consultation under this provision. Rather, it requires only that a consultation take place and, if the consulted agency (here, EPA) proposes additional conditions in a renewal order, that such conditions be included in the order unless DOE "determines that such condition would prevent the order from adequately addressing the emergency" and publicly explains its determination. Here, EPA recommended no additional conditions. Rather, EPA expressly acknowledged the

September Order's consistency with EPA's April 2016 Administrative Compliance Order (ACO) and expressed no concerns about DOE's approach.

Indeed, the statute expressly recognizes that, as occurred here, the consulted agency might not propose further conditions: "[t]he conditions, *if any*, submitted by such Federal agency shall be made available to the public." *Id.* (emphasis added). Thus, Sierra Club incorrectly reads the statute as requiring the consulted agency (*i.e.*, EPA) to verify, independently, DOE's compliance with FPA section 202(c)(2). The statute contains no such requirement or mechanism for such independent verification. Rather, FPA section 202(c)(4) provides the consulted agency the opportunity to propose conditions in a DOE order that would either supplement or substitute for conditions to be ordered by DOE and as to which DOE has discretion to accept or reject, subject to the requirement to explain its reasoning. Sierra Club incorrectly seeks to transform this consultation process from one in which an agency with specific environmental expertise advises DOE on conditions to one in which the consulted agency exercises an oversight role and must approve DOE's actions. However, Sierra Club offers no support for that interpretation, and DOE finds nothing in the text of the statute to support such an interpretation. DOE's consultation with EPA prior to issuing the September Order satisfied the statutory requirements.²

Next, Sierra Club suggests that alternative sources of power can and should replace Yorktown Units 1 and 2 generation during transmission outages or high load conditions, either of which could trigger the Remedial Action Scheme (RAS) that automatically sheds roughly 950 MW of load to prevent voltage collapse. *See Summary of Findings for Department of Energy Order No. 202-17-4*, at 4 (Sept. 14, 2017) (Summary of Findings). Notably, the Sierra Club acknowledges that the challenged September Order requires PJM and Dominion to exhaust available resources, including demand response and behind-the-meter generation resources, prior to operating Yorktown Units 1 or 2. Petition at 9-10. This reduces Sierra Club's objection to the fact that the September Order does not require the consideration of additional resources that may become available "over the course of the emergency." *Id.* at 10. In other words, Sierra Club concedes that the Department correctly evaluated available alternatives but quibbles that the Department should have analyzed speculative new resources as well.

While the Department does not oppose the use of alternative power sources generally, it explained in the September Order that, in its judgment and based on the record before it, the available alternative power cannot fully compensate for the loss of Yorktown Units 1 and 2 generation, and would therefore not suffice to preserve the reliability of the North Hampton Roads grid:

² Informal communications with EPA staff have continued. Despite learning of the Sierra Club's arguments in the October 6 petition, EPA personnel have not expressed an intent to add conditions.

Summary of Findings for Department of Energy Order No. 202-18-1

The only sufficient alternative to the RAS and its resulting outages for up to approximately 150,000 customers is the emergency operation of Yorktown Units 1 and 2. The demand response available to PJM is a small fraction of the load threshold and is “not sufficient to ensure reliable service.” Likewise, Dominion has limited demand-side management and curtailment capabilities, insufficient for reliability purposes even when fully deployed.

Id. at 6 (citations omitted).

Both the Department’s June 2017 and September 2017 orders specifically require the minimum use of Yorktown Units 1 and 2 that preserves system reliability—and, in fact, PJM and Dominion emphasize that “[h]istory and future projections show that the need [for operation of Yorktown Units 1 and 2] is far less than full time and, in total, may only amount to 81 days over the entire 18-20 month [transmission upgrade] period.” *Motion for Leave to Answer and Answer of Virginia Electric & Power Company and PJM Interconnection LLC*, at 10 (Oct. 20, 2017) (Answer). Under section 202(c), the Department is authorized “to require by order such temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy as in [the Secretary’s] judgment will best meet the emergency and serve the public interest.” The requirement is conjunctive, not disjunctive. The Department acknowledges that minimizing the use of Yorktown Units 1 and 2, both of which were planned to be retired by now, is in the public interest, along with exploring alternative power sources. In the Secretary’s judgment, however, reliance on alternative power sources alone, such as those Sierra Club suggests, does not best meet the emergency. The public interest is not served by the RAS being needlessly activated and power being shut off to 150,000 customers—and hundreds of thousands of people—which would be the result of insufficient generation during a transmission outage.

In assessing the need for an emergency order under section 202(c), the Department independently evaluates the situation, but it is not required to determine every reasonable alternative. The statute requires only that the Secretary use his or her best judgment to meet the emergency and serve the public interest. That judgment includes the determination of which factors play a central role in a given emergency and the weight to assign each such factor. In this situation, the expertise of the applicant was an important factor. The Department received an application from PJM, which is not only the regional transmission organization responsible for managing a transmission system across twelve states and the District of Columbia, but also holds the highest-level, federally-regulated reliability responsibilities for the system it manages. Summary of Findings at 2. The Department’s independent analysis of PJM’s request took into account the extensive earlier reviews conducted by PJM in evaluating the proposed solution. *Id.* at 2-3. Although DOE is not obligated to analyze the viability of alternative resources (especially at the unit level, which is an unbounded analysis if DOE were to consider potential new resources), the

following analysis broadly explains the rationale behind dispatching Yorktown Units 1 and 2 instead of other categories of alternative resources.

The alternatives Sierra Club presents for consideration (namely expanded demand response and distributed generation resources as well as battery storage) do not best meet the emergency because, unlike Yorktown Units 1 and 2, they cannot guarantee enough dispatchable power, both real³ and reactive,⁴ during excessive load periods or transmission outages. Reliance on alternatives to Yorktown Units 1 and 2 would require both real and reactive power supply, and achieving that over the anticipated remaining emergency timeframe⁵ is infeasible due to a combination of technical and market challenges. The precise amount of dispatchable power needed to replace Yorktown Units 1 and 2 varies based on a combination of the system configuration (*e.g.*, whether any other facilities are offline) and load. The Department's analysis reasonably focused on the worst-case scenario, which would draw on the full output of both Units 1 and 2, or 270 MW (net), and also have the option of providing reactive power support. The combined capacity of all currently-available alternatives does not reach 270 MW (net), and the Department explains below why those alternative resources, even if combined, are unlikely to become sufficient substitutes over the remaining emergency timeframe.

First, relying on available demand response is inadequate because it cannot provide sufficient reactive power support.⁶ Demand response is only a load reduction measure. Both real power and reactive power are critical to maintaining system reliability, and while demand response decreases both real power demand and reactive power demand, it does not generate power. The available demand response resources are few in number, and there is no indication in the record that market incentives could substantially and rapidly increase demand response over the anticipated emergency timeframe. PJM reports that it

³ The North American Electric Reliability Corporation (NERC) Glossary, as adopted by the NERC Board of Trustees, defines "real power" as "[t]he portion of electricity that supplies energy to the Load" — that is, to customers. Glossary of Terms Used in NERC Reliability Standards (updated Oct. 6, 2017), http://www.nerc.com/files/glossary_of_terms.pdf.

⁴ The NERC Glossary defines "reactive power" as "[t]he portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive Power must be supplied to most types of magnetic equipment, such as motors and transformers. It also must supply the reactive losses on transmission facilities. Reactive Power is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is usually expressed in kilovars (kvar) or megavars (Mvar)." *Id.*

⁵ This analysis applies to both the 90-day term of Order No. 202-17-4 and the estimated remaining time for the Skiffes Creek Transmission Project. The latter is expected to take 18-20 months. Four months have passed since construction commenced.

⁶ When load is reduced, the requisite reactive power required by the system is proportionally reduced. DOE does not treat that as reactive power support akin to the ancillary services provided by Yorktown Units 1 and 2, however, because demand response merely removes the need for some reactive power support rather than actively providing it.

has approximately 26 MW of demand response available during the 2017/2018 Planning Year, but just 0.7 MW of demand response resources are available year-round. Email from S. Pincus to R. Batra (Oct. 23, 2017), included in the docket of this Order.⁷ Additionally, Dominion reports that it has roughly 20 MW of Demand Side Management capability—specifically, remote air conditioning control, limited to a total of 120 hours and 30 days during the summer months. *Id.* Dominion also can curtail a large industrial customer by an average of 75 MW for transmission emergencies, but this curtailment is available only when the customer's load is about 99 MW, so that the reduced customer load is not more than 24 MW. *Id.* Even during the summer of 2017, the customer's load averaged 40 MW, well below the threshold for load curtailment. *Id.* Demand response is a voluntary program that even participating customers can decline to follow (at risk of contractual penalties). As such, PJM or Dominion cannot guarantee load reduction from demand response. Even if demand response were compulsory, it cannot provide reactive power benefits equivalent to generation units. For all of these reasons, reliance on demand response is not a workable solution to the reliability concerns at issue.

Second, distributed energy resources, such as rooftop solar and other behind-the-meter generation, also are insufficient to address the reliability concerns. Like demand response, behind-the-meter generation reduces the load a utility serves. But unlike demand response, distributed energy resources have the potential of adding supply to the system. This benefit is reduced, however, by two issues: (1) distributed energy resources are not assured because their availability depends on variable factors, such as solar radiation; and (2) reactive power support from distributed energy resources cannot be aggregated in a linear fashion, making its benefits too geographically constrained to be useful across the same area served by Yorktown Units 1 and 2. Distributed energy resources or behind-the-meter programs are also voluntary. Hence, customers cannot be compelled to install or use behind-the-meter generation. Current available resources are insufficient,⁸ and fundamental questions about how to fairly compensate owners likely preclude substantial shifts in this resource over the anticipated emergency timeframe.⁹ Thus, relying on

⁷ The annual availability schedule is as follows: 0.7 MW from January through April, 11 MW in May, 25.5 MW from June through September, 11 MW in October, and 0.7 MW from November to December.

⁸ PJM's forecast for distributed solar generation across the entire Dominion zone—not the smaller North Hampton Roads area—is 130MW (real power) at typical peaking conditions. Email from S. Pincus to R. Batra (Oct. 23, 2017). In weather patterns unfavorable to solar power generation, that number could drop to zero.

⁹ Earlier this year, FERC outlined the challenges in pricing sales of distributed energy back to the grid. *See* Policy Statement, Utilization of Electric Storage Resources for Multiple Services When Receiving Cost-Based Rate Recovery, 158 FERC ¶ 61,051 (Jan. 19, 2017). An "electric storage resource" is "a resource capable of receiving electric energy from the grid and storing it for later injection of electricity back to the grid." *Indianapolis Power & Light Co. v. Midcontinent Indep. Sys. Operator, Inc.*, 158 FERC ¶ 61,107 at P 6 n.14 (Feb. 1, 2017). That definition "include[s] all types of electric storage technologies, regardless of their size, storage medium (e.g., batteries, flywheels, pumped-hydro), or whether located on the interstate grid or on a distribution system." *Id.*

variable or intermittent resources for reactive power is not a solution to reliability concerns.

Finally, rechargeable battery storage, even if technically feasible,¹⁰ is not a viable solution because it would require a substantial financial outlay for long-life equipment to address a short-term problem that could be resolved in as little as 14 months when the Skiffes Creek Transmission Project comes online. To serve as an alternative to Yorktown Units 1 and 2, PJM and Dominion would have to procure enough battery storage to be on par with those units.¹¹ Insufficient battery storage would lead to the RAS being triggered, automatically shedding 950 MW of load. Suggesting that battery storage is a workable solution, Sierra Club's expert noted three recent examples: (1) a 20 MW, four-hour battery storage system; (2) a pair of four-MWh batteries, and (3) a 100 MW rechargeable storage system. *See* Sierra Club Exhibit F at 18-19. In this case, Dominion would need to procure approximately 270 MW (net) of battery storage to replace the output of Yorktown Units 1 and 2 adequately and reliably. Doing so would come at a high cost to ratepayers without a proven benefit if the full 270 MW is not required during the anticipated emergency timeframe.

Under Sierra Club's first example, Southern California Edison (SCE) recently procured four hours of 20 MW (80MWh) energy storage from Canada's AltaGas Ltd.¹² The Pomona Energy Storage Facility, built to house the batteries and inverters, was completed in under four months and came online in December 2016.¹³ The project, with its 80 MWh of discharge capacity, cost between \$40 million and \$45 million.¹⁴ Scaling those figures up for a rough estimate, a similar storage facility capable of 270 MW (net) output for four hours could cost approximately \$540 million to \$600 million. The cost of Tesla's project in South Australia, noted by Sierra Club as its third example, is estimated to be \$576 to \$730 per kilowatt,¹⁵ which roughly equates to between \$622 million and \$788

¹⁰ Unlike demand response or behind-the-meter generation, PJM and Dominion could deploy battery storage that could be available without contingencies, and some portion of direct-current battery output could be converted for reactive power support.

¹¹ Although it would be theoretically possible to deploy a combination of the alternative resources proposed by Sierra Club such that the required amount of battery storage could be reduced, it was the Department's judgment that, due to the minimal amount of demand response and behind-the-meter resources available, modeling combination scenarios would not serve to further inform DOE's review.

¹² <https://www.altagas.ca/sites/default/files/2017-02/Pomona%20Energy%20Storage%20brochure.pdf>.

¹³ *Id.*

¹⁴ *Id.*; <http://www.reuters.com/article/idUSFWN1AX0G9>.

¹⁵ <https://www.reuters.com/article/us-australia-power-tesla/teslas-big-battery-races-to-keep-south-australias-lights-on-idUSKCN1C40DD>. The costs described in Australian dollars (\$750 to \$950) were converted to U.S. dollars in this document using a market-closing exchange rate of 0.7687 U.S. dollars to 1 Australian dollar, as reported by the Wall Street Journal on Monday, October 30, 2017. *See* http://www.wsj.com/mdc/public/page/2_3021-forex.html.

million for the 270 MW, four-hour storage system contemplated earlier. Costs are highly variable and depend on procurement contract negotiations. But they would run into the hundreds of millions of dollars, and ratepayers would absorb a significant portion of those charges.¹⁶ The examples Sierra Club's expert mentions address different situations, as it appears the battery storage systems were purchased consistent with overall system planning goals, as opposed to the situation here that would add a costly new resource to an existing system as a short-term fix while longer-term solutions were constructed. In short, none of the examples presented is applicable to the reliability situation faced here. While battery storage has improved markedly, it is not a workable solution to the substantial reliability concerns the Department has addressed in this particular geographic area.

Using Yorktown Unit 3 to alleviate the emergency is PJM and Dominion's only remaining option, and its operating constraints prevent it from addressing the emergency. Unit 3 is oil-fired and has a maximum real output of 789 MW, but it is unreliable and can only operate at an 8 percent capacity factor (63 MW) to comply with EPA's Mercury and Air Toxics Standards (MATS). PJM Application (June 13, 2017) at 18; Email from S. Pincus to R. Batra (Oct. 23, 2017); Email from M. Regulinski to R. Batra (Nov. 2, 2017), included in the docket of this Order. Dominion has stated at least five significant reasons for its concerns about Unit 3: structural duct work and damper repairs, turbine inspections and repairs, waterbox repairs, turbine valve work and repairs, and various boiler tube leaks. *See id.* Apart from power output that is only a fraction of what Units 1 and 2 can produce, Unit 3 is so unreliable that Dominion has only operated it for 54 days in the past three (3) years. *See* Yorktown Unit 3 Days of Operation 2014-2016, included in the docket of this Order. Unit 3 is not a viable alternative due to limitations that prevent PJM from relying on that unit consistently and for an extended period of time.

Unlike the Sierra Club's proposed alternatives, either individually or in the aggregate, the Yorktown coal units can resolve the reliability emergency. They provide both real power and reactive power support, without contingencies, and at the levels required. Without the Yorktown Units, PJM cannot ensure the reliability of the grid in the North Hampton Roads area throughout the transmission upgrade schedule. For that reason, the authorization of the Yorktown Units to operate for reliability purposes only, despite being less than ideal, remains the *best* available option to meet the identified emergency.

¹⁶ For example, although SCE and Tesla did not disclose the contract price for Tesla's storage units at SCE's Mira Loma substation, SCE filed a rate case with the California Public Utilities Commission on March 30, 2017, seeking in part to recover costs of those facilities from its ratepayers. *See* Application of Southern California Edison Company (U 338-E) for Recovery of Aliso Canyon Utility Owned Energy Storage Costs (Mar. 30, 2017), [http://www3.sce.com/sscc/law/dis/dbattach5e.nsf/0/FE377273FDBE2408882580F3007B32BE/\\$FILE/A1703XXX-SCE%20Application%20for%20Cost%20Recovery%20of%20ACES%20UOS.pdf](http://www3.sce.com/sscc/law/dis/dbattach5e.nsf/0/FE377273FDBE2408882580F3007B32BE/$FILE/A1703XXX-SCE%20Application%20for%20Cost%20Recovery%20of%20ACES%20UOS.pdf).

Summary of Findings for Department of Energy Order No. 202-18-1

Sierra Club's reference to the 2005 Mirant 202(c) order, for the proposition that the Department can and should require ordered entities to obtain alternative energy sources during the period of an emergency, is misplaced. Specifically, Sierra Club cites the following discussion in Order No. 202-05-3 (the Mirant Order): "DOE expects that the DCPSC, having sought an emergency order, will take such actions as are within its authority to provide adequate and reliable electric service for the Central D.C. area including, for example, expediting approval of PEPCO transmission system upgrades and instituting demand response programs." Order No. 202-05-3, at 9 (Dec. 20, 2005), https://energy.gov/sites/prod/files/oeprod/DocumentsandMedia/mirant_122005_2.pdf. However, at least two key differences distinguish the September Order from the Mirant Order. First, Dominion already has a demand response program. As explained above, Dominion's demand response program cannot ensure reliability on the North Hampton Roads power grid during a transmission outage. Second, the Mirant Order urged the D.C. Public Service Commission to "take all reasonable actions." Again as explained above, even if each of Sierra Club's alternatives were viewed as reasonable, the alternatives are inadequate to solve the reliability emergency on their own.

A determination not to order Yorktown Units 1 and 2 to operate could result in severe collateral effects—namely, load shedding across the North Hampton Roads area. Power would be shut off to thousands of customers, which could impact over half a million people.¹⁷ Because the RAS is activated when load reaches a critical threshold, whether that threshold is triggered by a transmission outage or by heightened power demand, the full load is shed immediately. That is, the shedding is not piecemeal—950 MW of power immediately go off-line upon activation of the RAS. Without sufficient backup generation, the risk of load shedding pursuant to the RAS is far greater. While the September Order is directed at avoiding the emergency presented by that loss of power, it also takes into account the Department's independent analysis of the reliability situation in the North Hampton Roads area and an evaluation of proposed alternatives.¹⁸ Without an emergency order the region may suffer heavy load shedding, and the Department has determined to protect the public interest by exercising its authority to avoid the loss of power that otherwise would result.

¹⁷ See Summary of Findings at 4 (noting that the North Hampton Roads area population exceeded 660,000 in July 2016, according to U.S. Census estimates).

¹⁸ In light of a permanent solution coming online soon, this analysis did not model all permutations of alternative resources; instead, in the Department's judgment, an examination of whether there were any realistic substitute resources during the anticipated emergency timeframe was conducted.

The Department Complied With Its Environmental Review Obligations

Sierra Club also contends that the Department did not adequately assess the impact of its Order under the National Environmental Policy Act (NEPA), 42 U.S.C. 4321 *et seq.* NEPA requires federal agencies to consider the potential environmental impacts of their proposed actions before taking action. The regulations of the Council on Environmental Quality (CEQ) implementing NEPA, codified at 40 C.F.R. parts 1500–1508, establish three levels of review for proposed actions subject to NEPA: categorical exclusion (CX) determinations,¹⁹ environmental assessments (EA),²⁰ and environmental impact statements (EIS).²¹ In this instance, Sierra Club highlights the issuance of the September Order as the underlying action subject to NEPA review. The Department acted consistently with NEPA by issuing a CX determination, which is based on its assessment of the proposed action and determination that it fits within a category of actions previously established by the Department and found not to have a significant impact, individually or cumulatively, on the environment. *See* Record of Categorical Exclusion Determination issued on September 11, 2017.

Specifically, the proposed action fits within the CX for power marketing services and power management activities. That CX covers “[p]ower marketing services and power management activities (including, but not limited to, storage, load shaping and balancing, seasonal exchanges, and other similar activities), provided that the operations of generating projects would remain within normal operating limits.” *See* 10 C.F.R. Part 1021, Subpart D, Appendix B, B4.4.²² The September Order requires Dominion to “operate Units 1 and/or 2 of the Yorktown Power Station as directed by PJM only as needed to address reliability issues.” September Order at 2. Such operation fits squarely within the power management activities of load shaping and balancing that are included in B4.4.²³ Sierra Club does not dispute that the September Order authorizes covered power management activities. Instead, Sierra Club argues that the authorized operations would not be “within normal operating limits.” Petition at 7.

¹⁹ A CX is a category of actions that a federal agency has determined do not individually or cumulatively have a significant impact on the environment and for which, therefore, neither an environmental assessment nor an environmental impact statement is normally required. *See* 40 C.F.R. § 1508.4.

²⁰ An EA is a relatively brief analysis conducted to determine whether a proposed action may have a significant impact on the environment and, thus, whether an EIS is required. *See id.* § 1508.9.

²¹ An EIS is a detailed analysis of the potential environmental impacts of a proposed action (and alternatives) that may have a significant impact on the environment. *See id.* § 1508.11.

²² This CX was revised during a 2011 DOE rulemaking, in part, to make clear that it applies to power management activities, including those evaluated or overseen, even if not directly undertaken, by the Department. *See* 76 Fed. Reg. 214, 227 (Jan. 3, 2011).

²³ “Balancing” was added to “load shaping” in B4.4 during the rulemaking to make clear that the CX is intended to cover load balancing which “helps ensure system reliability by managing energy resources to be equal with load.” 76 Fed. Reg. 63,764, 63,777 (Oct. 13, 2011).

Summary of Findings for Department of Energy Order No. 202-18-1

Sierra Club's argument rests on its mistaken interpretation that "normal operating limits" refers to compliance with environmental standards, including MATS. *Id.* Rather, "normal operating limits" refers to elements of power generation capacity, not permit or other regulatory limits.

First, the Sierra Club's interpretation fails to account for the words "would remain" that precede "within normal operating limits" in the CX. "Would remain" provides important context, demonstrating that the CX contemplates the proposed operation being evaluated against the current operation to see if the operations will be consistent, *i.e.*, "would remain within normal operating limits." Sierra Club's interpretation would require one to evaluate the proposed operation against other operating units, reading the words "would remain" out of the regulation. As such, Sierra Club's interpretation of the CX is erroneous and conflicts with the regulatory text.

Second, Sierra Club offers no authority in support of its interpretation. As explained below, the CX refers to "normal operating limits," which DOE interprets to refer to elements of power generation capacity, not permit or other regulatory limits, such as Clean Air Act emissions limits as Sierra Club contends. The text of the regulation and industry practice both amply support the Department's interpretation of its own CX. Moreover, the Supreme Court has explained that "[w]hen an agency interprets its own regulation, the Court, as a general rule, defers to it unless that interpretation is plainly erroneous or inconsistent with the regulation." *Decker v. Nw. Env'tl. Def. Ctr.*, 568 U.S. 597, 613 (2013) (internal quotation marks omitted) (citing *Chase Bank USA, N.A. v. McCoy*, 562 U.S. 195, 208 (2011) (quoting *Auer v. Robbins*, 519 U.S. 452, 461 (1997))).

In its CX determinations for these orders, the Department interpreted the language "would remain within normal operating limits" to mean that operations would remain within normal *operational* capacities and limits. *See* CX determinations for the June and September Orders; *see also* CX Determination for Order No. 202-17-1 (Categorical Exclusion Determination, Grand River Dam Authority).²⁴ The operational capacities for Units 1 and 2 are reflected in their maximum real outputs of 159 MW and 164 MW

²⁴ The Department's establishment of other CXs related to electrical power and transmission supports its interpretation that normal operating limits relates to operational capacity. For example, for some actions, the Department has established corollary categories of actions that typically require a CX, EA, or EIS. *See, e.g.*, the CX at B4.1, which covers certain electric power acquisitions involving "existing generation resources operating within their normal operating limits." 10 C.F.R. Part 1021, Subpart D, Appendix B. The EA corollary for this CX is C7, which applies, in part, to "changes in the normal operating limits of generation resources equal to or less than 50 average megawatts," and the D7 EIS corollary, which applies to "changes in the normal operating limits of generation resources greater than 50 average megawatts." *Id.* It is clear from the focus on MWs in these provisions that the term "normal operating limits" refers to operational capacity.

Summary of Findings for Department of Energy Order No. 202-18-1

respectively, with a net output²⁵ from each unit of 135 MW. *See* PJM Application (June 13, 2017) at 5; Email from M. Regulinski to R. Batra (Sept. 5, 2017); Email from M. Regulinski to R. Batra (Oct. 27, 2017). The maximum real outputs represent the high end of the operating parameters for these units. The objective is to operate the units consistent with these outputs; such operation is consistent with the prescribed normal operating limits.²⁶ The Department's determination that the units will remain within normal operating limits is supported by the record. As evidenced by the operational data provided to date for operations under the June and September Orders, these units have remained within their maximum real output limits. *See* Renewal Application, Attachment 1; Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4 (Sept. 28, 2017), Attachments 1, 3, and 5. Pursuant to the September Order, these units will remain within their operational capacities and are expected to operate below their capacity given the restrictions provided in the September Order (*i.e.*, operate as directed by PJM only as needed to address reliability issues and exhaust all reasonably and practically available resources prior to operating). In fact, the units are anticipated to run only 81 days over the 18-20 month construction period, Answer at 10, which is 81 out of 540-600 days or 13-15% of the time.

Third, DOE's interpretation is consistent with the common understanding of the term "operating limits" in the technical community and in the context of the power generation facilities at issue. For example, NERC defines "equipment rating" to mean "[t]he maximum and minimum voltage, current, frequency, real and reactive power flows on individual equipment under steady state, short-circuit and transient conditions, as permitted or assigned by the equipment owner." Glossary of Terms Used in NERC Reliability Standards (updated Oct. 6, 2017), http://www.nerc.com/files/glossary_of_terms.pdf. NERC defines "normal rating" as "[t]he rating as defined by the equipment owner that specifies the level of electrical loading, usually expressed in megawatts (MW) or other appropriate units that a system, facility, or element can support or withstand through the daily demand cycles without loss of equipment life." *Id.*

In the alternative, even under Sierra Club's proffered interpretation that the phrase "normal operating limits" includes considerations beyond operational capacity, such as Clean Air Act emissions requirements, the September Order and operation of Units 1 and 2 pursuant to that Order would meet the parameters of B4.4. Sierra Club argues that the operation of these units will not be within normal operating limits because such operation would not be in compliance with MATS. *See* Petition at 7. However, as Sierra Club acknowledges, these units are proposed for deactivation because they are not, and never

²⁵ The net MW output is "the gross output of the units reduced by station auxiliary power, which is the power needed to operate the station itself and the generation units." Email from M. Regulinski to R. Batra (Oct. 27, 2017).

²⁶ While it is possible for a unit to exceed its maximum real outputs, doing so is ill-advised, as it could result in overheating, equipment damage, inefficiencies, and a shortened operational life of the unit.

have been, in compliance with MATS. *See id.* Accepting *arguendo* Sierra Club's interpretation that the phrase "normal operating limits" under which Units 1 and 2 "would remain" refers to how the units have operated in relation to MATS compliance, then it follows that "normal operation" of these particular units is non-compliance. In other words, under this reading of the regulation, "normal operating limits" and MATS non-compliance would be co-extensive.

The MATS took effect in April 2012. *See* 77 Fed. Reg. 9304 (Feb. 16, 2012). Section 112(i)(3)(A) of the Clean Air Act allowed existing power plants three years—*i.e.*, until April 2015—to comply with MATS. *See* 42 U.S.C. § 7412(i)(3)(A). During these three years, Yorktown Units 1 and 2 were not operating in compliance with MATS. Section 112(i)(3)(B) of the Clean Air Act further allowed for a one-year extension of compliance until April 2016. *See id.* § 7412(i)(3)(B). Dominion sought and received this compliance extension from the Virginia Department of Environmental Quality (VADEQ). Thereafter, Dominion sought and received an ACO from EPA. *See* AED-CAA-113(a)-2016-0005. The ACO allowed the Yorktown Units 1 and 2 to operate, under certain conditions, through April 15, 2017. *See id.* at 8. In the five and a half years since the MATS took effect, the Yorktown units have never been equipped to comply with MATS. Nevertheless, they have operated, and for five of those years, they were operating pursuant to allowances in the Clean Air Act. The Department's Orders allow for continued conditional operation, incorporating conditions contained in EPA's ACO, consistent with how these units have operated (as relates to MATS) for years.

In addition to the applicability of the B4.4 CX, Sierra Club argues that the June Order and the September Order are major federal actions significantly affecting the environment. *See* Petition at 6. Sierra Club points to the mercury and hydrogen chloride (HCl) per-pound emissions estimates (3.3068 lbs./TBtu and 0.0478 lbs./MMBtu, respectively)²⁷ that were provided by PJM in its Renewal Application and notes that these estimated emissions exceed the MATS for these two pollutants. *See id.*; Renewal Application, Attachment 2. First, these per pound emissions estimates are based on emissions factors, and the projected monthly emissions provided by PJM are based on conservative operational assumptions and are intended to be bounding. For example, PJM's monthly emissions estimates are based on its expectations that there will be a total of 81 days over load thresholds that will necessitate operation of Units 1 and/or 2. *See* Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4 (Sept. 28, 2017), Attachment 4. The monthly emissions estimates "are based on full operating days" and conservatively assume an operating day consists of "24 hours of operation, 16 hours at low load and 8 hours at maximum load." Report on Yorktown Units 1 and 2 Operations

²⁷ PJM's per pound emissions estimates for mercury and HCl are based on emissions factors from AP-42, Fifth Edition. *See* Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-2 (Aug. 24, 2017) at 4. Mercury emissions were based on AP-42, Table 1.1-18 and HCl was based on AP-42, Table 1.1-15. *See id.*

Summary of Findings for Department of Energy Order No. 202-18-1

Pursuant to Order No. 202-17-2 (Aug. 24, 2017) at 4. Second, in order to minimize emissions, the Secretary included conditions in the September Order to minimize the impacts from operation of Yorktown Units 1 and 2. As such, there is no indication that the emissions estimated by PJM will necessarily be reached.

Moreover, DOE consulted with EPA about the September Order, and EPA had the opportunity to suggest additional conditions it determined “necessary to minimize any adverse environmental impacts to the extent practicable.” 16 U.S.C. § 824a(c)(4)(B). EPA did not suggest additional conditions or indicate concerns with DOE’s approach. *See* Email from L. Starfield to P. Hoffman (Sept. 11, 2017), available at <https://energy.gov/oe/downloads/additional-documents-order-no-202-17-4>.

Nevertheless, there is a reasonable expectation that some emissions could exceed the MATS. Yorktown Units 1 and 2 are not equipped to be MATS compliant. As all parties have acknowledged, that is the reason Dominion seeks to retire the units and why it sought and was granted compliance extensions from VADEQ and EPA, and in part, why the September Order²⁸ was requested.

After stating the per pound emissions estimates, Sierra Club then cites to PJM’s estimates for total emissions of mercury and HCl over the projected 18-20 month period and concludes, without any supporting analysis related to the operation of Units 1 and 2, that “[t]hose emissions will have a significant impact.” Petition at 6. DOE assessed the constrained operation allowed under the September Order and determined that the constraints were consistent with those previously imposed by EPA in the ACO, and that such operations would not result in significant impacts. Sierra Club cites to selective parts of EPA’s May 2011 proposed rulemaking related to National Emissions Standards for Hazardous Air Pollutants and Standards of Performance which are inapposite to the Order,²⁹ and states that mercury is hazardous even in small quantities and that HCl can cause acute and chronic health harms. *See id.* Also, as an attachment to its Petition, Sierra Club includes a 2011 EPA memorandum related to a non-Hg case study of chronic

²⁸ “[A]ction taken by a party, that is necessary to comply with an order issued under this subsection” which “results in non-compliance with . . . any Federal, State, or local environmental law or regulation . . . shall not be considered a violation . . . or subject such party to any requirement, civil or criminal liability, or a citizen suit.” 16 U.S.C. § 824a(c)(3).

²⁹ For example, Sierra Club notes a dose of .0001mg/kg-day for mercury and states that exposures above that level raise health concerns. *See* Petition at 6. This dose is the “reference dose” (RfD) for methyl mercury, which was described during the rulemaking as “the amount of a chemical which, when ingested daily over a lifetime, is anticipated to be without adverse health effects to humans, including sensitive subpopulations.” 76 Fed. Reg. 24,976, 24,982 (May 3, 2011). The rulemaking further described the RfD as “an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily exposure . . . that is likely to be without an appreciable risk of deleterious effects during a lifetime.” *Id.* at 25,000. This scenario plainly does not reflect expected exposure based on operations under the September Order. The operations of Units 1 & 2 will be limited to generation needed to meet grid reliability, and will be of a limited 18-20 month duration.

Summary of Findings for Department of Energy Order No. 202-18-1

inhalation risks that does not correlate to the emissions or potential exposures related to the September Order.³⁰ *See* Petition at 6; EPA Memorandum (Mar. 16, 2011) attached to Petition. Yet, Sierra Club has provided no applicable data or analysis in support of this claim, and therefore has failed to demonstrate significant impacts from the subject Order.

Finally, Sierra Club notes that CEQ has NEPA procedures that are applicable in emergency situations. *See* Petition at 8. The Department agrees that § 1506.11 provides that “[w]here emergency circumstances make it necessary to take an action with significant environmental impact without observing the provisions of these regulations, the federal agency taking the action should consult with the Council about alternative arrangements.” As explained above, the Department concluded that issuance of the September Order would not result in significant environmental impacts. Therefore, alternative arrangements and consultation were not required. In this case, the Department has chosen to proceed consistently with one of the established levels of NEPA review: issuance of a CX determination.³¹

Sierra Club concludes by stating that the extended nature of the situation provides time for DOE to conduct additional NEPA review and to inform subsequent renewals. *See* Petition at 9-10. As detailed above, the Department has complied with NEPA by issuing a CX determination. Nevertheless, the Department will evaluate any future renewal applications from PJM and assess the appropriate level of NEPA review based on the facts presented at that time.

Conclusion

When emergency situations arise, it is critical to have the tools to respond to them quickly, efficiently, and effectively. The Department issued the September Order because, in the Secretary’s judgment, its provisions would best meet the emergency and serve the public interest in the North Hampton Roads area. The operative interest is in keeping the lights on, allowing the PJM-mandated transmission upgrades to continue, while to the maximum extent practicable remaining consistent with environmental law and minimizing the adverse effects of power generation on human health and the environment. The September Order is tailored to accomplish those goals. Accordingly, Sierra Club’s petition for rehearing is denied.

³⁰ Sierra Club cites this inapposite study because it references the Yorktown facility. The study was actually based on 5-year concentrations for pollutants that were calculated based on information from 2005-2009, and the maximum individual risk for each facility was calculated based on “risk associated with a continuous lifetime (24 hours per day, 7 days per week, and 52 weeks per year for a 70-year period) exposure to the maximum concentration.” EPA Memorandum at 12.

³¹ Sierra Club incorporates by reference Section IV.C of its original Petition. *See* Petition at 8 n.5. The substantive arguments raised therein have been addressed above.

From: Jereza, Catherine
To: Konieczny, Katherine; Bittner, Kathy (CONTR)
Cc: Drake, Christopher; Batra, Rakesh; Rosenbaum, Matthew
Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)
Date: Monday, November 06, 2017 3:56:48 PM

Perfect – thank you all and congrats to a job well done! I will add Kevin and change my greeting to “afternoon” since we are doing this before 4pm today ☺

Cheers

Katie

From: Konieczny, Katherine
Sent: Monday, November 06, 2017 3:51 PM
To: Bittner, Kathy (CONTR) ; Jereza, Catherine
Cc: Drake, Christopher ; Batra, Rakesh ; Rosenbaum, Matthew
Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Looks like the right one. Attached as pdf with name omitting the date/time. I also added one email address to the draft notification email below. Kevin Finto is outside counsel to Dominion and he signed Dominion’s last filing.

-Kathy K

From: Bittner, Kathy (CONTR)
Sent: Monday, November 06, 2017 3:39 PM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Cc: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Sure, here it is.

From: Jereza, Catherine
Sent: Monday, November 06, 2017 3:36 PM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>
Cc: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy – do you have the electronic version that includes John Lucas’ edits? Can you send so we can make sure the right version goes out.

Once we have that, I’ll be sending the email out below.

Thanks!

Katie

From: Jereza, Catherine
To: Steven.Pincus@pjm.com; craig.glazer@pjm.com; michael.regulinski@dominionenergy.com; sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com

Cc: Walker, Bruce; Hoffman, Patricia; Batra, Rakesh; Konieczny, Katherine

Subject: DOE Order 202-18-1

Good evening,

Today the Secretary of Energy issued Order No. 202-18-1. The Order and Summary of Findings are attached.

Regards,

Katie

From: Bittner, Kathy (CONTR)

Sent: Monday, November 06, 2017 3:07 PM

To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>

Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Katie and Matt,

Just wanted to make sure that you are aware that the order was signed (see attached).

Let me know if you need anything else.

Thanks,

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Bittner, Kathy (CONTR)

Sent: Friday, November 03, 2017 3:31 PM

To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>

Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Katie and Matt,

FYI..I took the package to Exec Sec. It has cleared Exec Sec review and is with the Deputy Secretary now.

Have a great weekend.

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Jereza, Catherine

Sent: Friday, November 03, 2017 12:35 PM

To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>

Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy – I'm in my office now.

Cheers

Katie

From: Jereza, Catherine
To: Steven.Pincus@pim.com; craig.glazer@pim.com; michael.regulinski@dominionenergy.com; saniay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com
Cc: Walker, Bruce; Hoffman, Patricia; Batra, Rakesh; Konieczny, Katherine
Subject: DOE Order 202-18-1
Date: Monday, November 06, 2017 3:59:07 PM
Attachments: Signed Order 202-18-1.pdf
Summary of Findings Order No. 202-18-1.pdf

Good afternoon,

Today the Secretary of Energy issued Order No. 202-18-1. The Order and Summary of Findings are attached.

Regards,
Katie

Catherine Jereza
Deputy Assistant Secretary, Transmission Permitting & Technical Assistance
Office of Electricity Delivery & Energy Reliability
U.S. Department of Energy
(o) 202.586.0334
(c) (b) (6)

Aleisha Harris
aleisha.harris@hq.doe.gov
202.586.3876

**** Please contact Aleisha for all meeting and scheduling requests. ****

From: Drake, Christopher
To: Jereza, Catherine
Cc: Batra, Rakesh; Rosenbaum, Matthew; Konieczny, Katherine
Subject: RE: DOE Order 202-18-1
Date: Monday, November 06, 2017 4:01:00 PM

Katie,

Yes, we'll take care of it.

-----Original Message-----

From: Jereza, Catherine
Sent: Monday, November 06, 2017 4:00 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: DOE Order 202-18-1

I guess this is a go on the website postings, etc. Can you help with that again?

-----Original Message-----

From: Konieczny, Katherine
Sent: Monday, November 06, 2017 2:00 PM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: DOE Order 202-18-1
Importance: High

Hi Katie,
(b) (5)

Thanks,
Kathy

-----Original Message-----

From: Jereza, Catherine
Sent: Thursday, September 14, 2017 6:27 PM
To: Steven.Pincus@pjm.com; craig.glazer@pjm.com; michael.regulinski@dominionenergy.com; sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org
Cc: Hoffinan, Patricia <Pat.Hoffinan@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Subject: DOE Order 202-17-4

Good evening,

Today the Secretary of Energy issued Order No. 202-17-4. The Order and Summary of Findings are attached.

Regards,
Katie

Catherine Jereza
Deputy Assistant Secretary, Transmission Permitting & Technical Assistance
Office of Electricity Delivery & Energy Reliability

U.S. Department of Energy
(o) 202.586.0334
(c)(b) (6)

Aleisha Harris
aleisha.harris@hq.doe.gov
202.586.3876

**** Please contact Aleisha for all meeting and scheduling requests. ****

From: Michael Regulinski
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Burlew, James M.; Mohammed Alfayyumi; Mike Barner; casey.roberts@sierraclub.org; saniay.narayan@sierraclub.org
Subject: Yorktown Units Test Run Report; DOE Order No. 202-17-4
Date: Thursday, November 09, 2017 5:39:44 PM
Attachments: DOE Report Nov 9 2017 Yorktown Test Run.pdf
YT12 Intake Circulating Water Usage Oct 2017.xlsx
Yorktown Bi-Weekly Hourly Emissions Data 20171017-20171030.xlsx

Please see attached Yorktown Test Run Report required by DOE Order No. 202-17-4. Please let me know if you have any questions. Thanks,

Michael C. Regulinski
Managing General Counsel
Dominion Energy Services, Inc.
teline: 738-2794
P: (804) 819-2794
C: (b) (6)
michael.regulinski@dominionenergy.com

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November 9, 2017



The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4

Dear Secretary Perry:

Pursuant to Order No. 202-17-4 (the "Order") issued on September 14, 2017, by the Secretary of Energy ("Secretary"), PJM Interconnection, L.L.C. ("PJM") and Dominion Virginia Electric and Power Company ("Dominion Energy Virginia") respectfully submits the attached reports regarding a test run of Yorktown Units 1 and 2 on October 25 2017 in accordance with the Secretary's directive to "report all dates on which Yorktown Unites 1 and 2 are operated as well as the estimated emissions and water usage data associated with their operations."¹

In the PJM application submitted June 13, 2017 (incorporated by reference in the PJM August 24 renewal application), PJM explained that emissions from the plant would occur at times outside of periods where PJM dispatches the Yorktown units for reliability.² These times include basic, periodic, and compliance related activities undertaken to ensure the units remain reliable and capable of operating when necessary. These activities are consistent with normal operating procedures and good engineering practices. These activities include operating equipment for maintenance testing and reliability check out, testing of fuel systems, tuning of units, required emissions or operational testing, and other operating procedures. Without performing these activities Dominion Energy Virginia may not be prepared to run the Yorktown Units when directed by PJM to ensure reliability.

¹ Order at page 2. The Order is for the period September 15 to December 14, and directs the emission report to be submitted every two weeks. November 9 is the end of the fourth two week period.

² PJM Application at page 13, incorporated by reference in the PJM Renewal Application at page 1.

On October 25, for approximately 5 hours Dominion Energy Virginia tested equipment on the Yorktown Units as part of a quarterly effort to ensure reliability of these two units when called upon by PJM to provide grid stability. This testing included running sub-systems and firing of ignitors and warm up burners to functionally test and verify operation for start-up. Dominion Energy Virginia did not fire the boiler for any extended period but just long enough to cycle through all the ignitors and warm up the burners. The Company tests each unit individually; the first run was the unit 1 reliability test and the second run was the unit 2 reliability test run. The two tests differed in duration due to troubleshooting of equipment issues for the start-up as well as working through some opacity issues that is commonplace when a boiler sits for a period of time and ash settles in the ductwork.

Dominion Energy Virginia does not plan on testing these units again this year but will likely test again at the beginning of 2018 depending on whether PJM dispatches the units and they operate before the end of December. If PJM dispatches the units, Dominion Energy Virginia plans on conducting these tests 2-1/2 to 3 months after the last run. For example, PJM dispatches the units in mid- December, Dominion Energy Virginia would not test again until near the end of March, but if PJM dispatches the units in late December, January, or February the units would not test again until near the end of May.³

Attachment 1 to this report is the Yorktown Power Station Bi-weekly Emissions Data for October 17 to October 30 that shows the actual runtime and air emissions data for the period. This spreadsheet includes hourly runtime data for the equipment for the Yorktown units, and raw and calculated data showing emissions data associated with operations of the equipment. Note that the Yorktown generators did not generate any power transmitted to the grid during the test.

The information in Attachment 1 reports hourly emissions of PM-10 and SO₂ in pounds per hour and pounds per million BTU, and mercury in pounds per hour and pounds per trillion BTU (Mercury and Air Toxics Standards (MATS) format) for the operating period beginning August 21 through August 23, 2017. Additionally, Attachment 1 provides hourly emissions of NO_x in pounds per hour, greenhouse

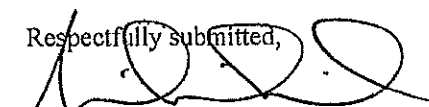
³ The later test date runs assumes, of course, that PJM submits another renewal application which is subsequently granted by the Secretary.

gases (as CO₂) in tons per hour, lead in pounds per hour, HCl in pounds per hour, HF in pounds per hour, and CO in pounds per hour. NO_x and SO₂ emissions are based on valid hours of Continuous Emissions Monitoring System (CEMS) data for the period. PM-10 emissions are based on the emission factor derived from the July 21, 2017 stack test (0.0168 lbs/mmBtu corrected to 0.1143 lbs/mmBtu calculated for PM-10 filterable plus condensable). CO₂ emissions are based on valid CEMS hours for the operating period. All other emissions were calculated using emission factors from AP-42, Fifth Edition, Volume 1, Chapter 1: External Combustion Sources and calculated hourly coal consumption in tons.⁴

Attachment 2 of this report is entitled "Yorktown Power Station October 2017 Circulating Water Usage for Reliability Test." This report provides the intake circulating water usage for the Yorktown units tests.

PJM and Dominion Energy Virginia respectfully submits the information in this report be accepted by the Secretary as compliant with the Order's directives to report all dates on which Yorktown Units 1 and 2 are operated well as the estimated and actual emissions and water usage data associated with their operations.

Respectfully submitted,



Michael C. Regulinski
Managing General Counsel
Dominion Energy Services, Inc.
120 Tredegar Street, RS-2
Richmond, Virginia 23219
Phone: (804) 819-2794
Email: michael.regulinski@dominionenergy.com

⁴ Mercury and lead emissions were calculated using AP-42, Table 1.1-18. CO emissions were calculated using emission factors from AP-42, Table 1.1-3. Total HAP metals and individual HAP metals are not provided because MATS Table 2 (40 CFR 63, Subpart UUUUU) provides for compliance with either the PM limit or total non-mercury HAP metals limits or individual HAP metals. Dominion Energy Virginia is providing PM-10 emissions for the purposes of MATS. HCl and HF emissions were calculated using emission factors from AP-42, Table 1.1-15.

Steven R. Pincus
Associate General Counsel
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955 Jefferson Avenue
Valley Forge Corporate Center
Norristown, PA 19403-2497
Phone: 610-666-4370
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Craig Glazer
VP, Federal Government Policy
PJM Interconnection, L.L.C.

Cc: Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Michael C. Regulinski, Dominion Energy Services, Inc.
Casey Roberts, Sierra Club Environmental Law Program

Yorktown Power Station October 2017 Circulating Water Usage for Re

Unit	On-Line	Off-Line	Days On-Line	Start-up Notification	Turbine Metal Temp < 300 deg
1	10/25/17 15:41	10/25/17 21:27	0.24	10/25/17 15:41	10/25/17 21:27
Million gallons of Intake Circulating Water th					

Unit	On-Line	Off-Line	Days On-Line	Start-up Notification	Turbine Metal Temp < 300 deg
2	10/25/17 22:02	10/26/17 0:22	0.10	10/25/17 22:02	10/26/17 0:22
Million gallons of Intake Circulating Water th					

Total million gallons through Unit 1

liability Test

<i>Total Cooling Water Days</i>	<i>Total Water Amount (Mgal)</i>
0.24	34
rough Unit 1	34

<i>Total Cooling Water Days</i>	<i>Total Water Amount (Mgal)</i>
0.10	14
rough Unit 2	14

& 2	48
----------------	-----------

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
Oct 17, 2017 through Oct 30, 2017

Substituted Data	Unit 1 Load		Unit 2 Load		Common Stack									
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	10-17-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-17-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Dominion Energy - Yorktown Power Station
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Submitted Data	Unit 1 Load		Unit 2 Load		Common Stack									
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	10-18-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-18-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-19-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Dominion Energy - Yorktown Power Station
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Substituted Data	Unit 1 Load		Unit 2 Load		Common Stack									
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	10-20-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-20-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

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Substituted Data	Unit 1 Load		Unit 2 Load		Common Stack									
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	10-21-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-21-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-22-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

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Substituted Data	Unit 1 Load		Unit 2 Load		Common Stack									
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	10-23-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-23-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

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Substituted Data	Unit 1 Load		Unit 2 Load		Common Stack									
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	10-24-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-24-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 17	0	0	0.20	2.0	0.0	0.1	0.2	0.08	0.233172	5.77E-06	6.75E-06	0.09753	0.012191
	10-25-2017 18	0	0	1.00	10.6	0.0	0.6	1.1	0.42	1.21158	3E-05	3.51E-05	0.506773	0.063347
	10-25-2017 19	0	0	1.00	11.0	0.0	0.3	1.1	0.44	1.2573	3.11E-05	3.64E-05	0.525896	0.065737
	10-25-2017 20	0	0	0.93	21.8	0.1	0.3	2.2	0.87	2.487397	6.16E-05	7.2E-05	1.040414	0.130052
	10-25-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-25-2017 23	0	0	0.50	11.4	0.1	0.1	1.2	0.45	1.297305	3.21E-05	3.75E-05	0.542629	0.067829

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Substituted Data	Unit 1 Load		Unit 2 Load		Common Stack									
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	10-26-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-26-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

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Substituted Data	Unit 1 Load		Unit 2 Load		Common Stack									
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	10-27-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-27-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-28-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

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Substituted Data	Unit 1 Load		Unit 2 Load		Common Stack									
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	10-29-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-29-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
Oct 17, 2017 through Oct 30, 2017

Substituted Data	Unit 1 Load		Unit 2 Load		Common Stack									
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	10-30-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	10-30-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	Bi-Weekly Total Tons				56.8	0.0	0.0	5.8	2.26	0.003243	8.03E-08	9.38E-08	0.001357	0.00017
					mmBtu									

Note:

All data are collected and processed in accordance with Part 75.

Data with orange fill are substituted in accordance with Part 75.

Monthly sums may not agree with data published by EPA due to the handling of quarterly and annual totals.

From: [Bittner, Kathy \(CONTR\)](#)
To: [Batra, Rakesh](#)
Cc: [Jereza, Catherine](#)
Subject: 2017-008571 - Yorktown Run Test Run Report (Order 202-17-4)
Date: Tuesday, November 14, 2017 1:21:35 PM
Attachments: [2017-008571 - Incoming.pdf](#)

Hi Rakesh and Katie,

I believe that you both have received this, but wanted to send it just in case.

From a correspondence perspective, no further action is required.

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

11/9/17

Stanton, Kimberly (CONTR)

From: Michael Regulinski <michael.regulinski@dominionenergy.com>
Sent: Thursday, November 09, 2017 5:39 PM
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tarn, Simon K.; Glazer, Craig; O'Hara, Chris; Burlew, James M.; Mohammed Alfayyumi; Mike Barner; casey.roberts@sierraclub.org; sanjay.narayan@sierraclub.org
Subject: Yorktown Units Test Run Report; DOE Order No. 202-17-4
Attachments: DOE Report Nov 9 2017 Yorktown Test Run.pdf; YT12 Intake Circulating Water Usage_Oct 2017.xlsx; Yorktown Bi-Weekly Hourly Emissions Data 20171017-20171030.xlsx

Please see attached Yorktown Test Run Report required by DOE Order No. 202-17-4. Please let me know if you have any questions. Thanks,

Michael C. Regulinski
Managing General Counsel

Dominion Energy Services, Inc.
teline: 738-2794
P: (804) 819-2794
C: (b) (6)
michael.regulinski@dominionenergy.com

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From: Konieczny, Katherine
To: Batra, Rakesh
Subject: RE: DOE Informal Question
Date: Tuesday, November 21, 2017 11:18:18 AM

Thanks, Rakesh! Happy Thanksgiving!

From: Batra, Rakesh
Sent: Tuesday, November 21, 2017 10:48 AM
To: Michael Regulinski ; Pincus, Steven ; Sharon L. Burr ; Miranda R Yost ; Rick R Linker ; Mike Barmer ; Mohammed Alfayyumi
Cc: Konieczny, Katherine ; Drake, Christopher
Subject: DOE Informal Question
(b) (5)

Order No. 202-17-4 was issued on September 14, 2017. By its own terms and by statute, it expires on **December 13, 2017**. Ordering paragraph D. states that “[i]f the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before this Order expires.” (b) (5)

Thanks,
Rakesh Batra
202-586-1283

From: Pincus, Steven
To: Batra, Rakesh; Michael Regulinski; Sharon L. Burr; Miranda R Yost; Rick R Linker; Mike Barner; Mohammed Alfayyoumi; Konieczny, Katherine; Tam, Simon K.; Bryson, Mike E.; Souder, David W.; Glazer, Craig
Cc: Drake, Christopher; O'Hara, Chris; Mars, Jennifer A.
Subject: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions
Date: Tuesday, November 21, 2017 2:57:06 PM

(b) (5)

Thank you and Happy Thanksgiving.

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

This e-mail message and any attached files are confidential and are solely for the use of the intended recipient.

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]
Sent: Tuesday, November 21, 2017 10:48 AM
To: Michael Regulinski; Pincus, Steven; Sharon L. Burr; Miranda R Yost; Rick R Linker; Mike Barner; Mohammed Alfayyoumi
Cc: Konieczny, Katherine; Drake, Christopher
Subject: DOE Informal Question

External Email! Think before clicking links or attachments.

(b) (5)

Order No. 202-17-4 was issued on September 14, 2017. By its own terms and by statute, it expires on **December 13, 2017**. Ordering paragraph D. states that "[i]f the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before this Order expires." (b) (5)

Thanks,
Rakesh Batra
202-586-1283

From: Pincus, Steven
To: Konieczny, Katherine; [Batra, Rakesh](#); [Michael Regulinski](#); [Sharon L. Burr](#); [Miranda R Yost](#); [Rick R Linker](#); [Mike Barmer](#); [Mohammed Alfayyumi](#); [Tam, Simon K.](#); [Bryson, Mike E.](#); [Souder, David W.](#); [Glazer, Craig](#)
Cc: [Drake, Christopher](#); [O'Hara, Chris](#); [Mars, Jennifer A.](#); [Rosenbaum, Matthew](#); [Mills, Brian](#)
Subject: RE: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions
Date: Wednesday, November 22, 2017 1:13:52 PM

We will try to reschedule for Tuesday.

From: Konieczny, Katherine [<mailto:Katherine.Konieczny@Hq.Doe.Gov>]
Sent: Wednesday, November 22, 2017 1:06 PM
To: Pincus, Steven; [Batra, Rakesh](#); [Michael Regulinski](#); [Sharon L. Burr](#); [Miranda R Yost](#); [Rick R Linker](#); [Mike Barmer](#); [Mohammed Alfayyumi](#); [Tam, Simon K.](#); [Bryson, Mike E.](#); [Souder, David W.](#); [Glazer, Craig](#)
Cc: [Drake, Christopher](#); [O'Hara, Chris](#); [Mars, Jennifer A.](#); [Rosenbaum, Matthew](#); [Mills, Brian](#)
Subject: RE: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

External Email! Think before clicking links or attachments.

It appears that none of the DOE program folks is available at 5pm Monday. Can the call be moved earlier in the day? Tuesday 11/28 is preferred.

From: Pincus, Steven [<mailto:Steven.Pincus@pjm.com>]
Sent: Wednesday, November 22, 2017 1:00 PM
To: [Batra, Rakesh](#) <Rakesh.Batra@Hq.Doe.Gov>; [Michael Regulinski](#) <michael.regulinski@dominionenergy.com>; [Sharon L. Burr](#) <sharon.l.burr@dominionenergy.com>; [Miranda R Yost](#) <Miranda.R.Yost@dominionenergy.com>; [Rick R Linker](#) <rick.r.linker@dominionenergy.com>; [Mike Barmer](#) <mike.barmer@dominionenergy.com>; [Mohammed Alfayyumi](#) <mohammed.alfayyumi@dominionenergy.com>; [Konieczny, Katherine](#) <Katherine.Konieczny@Hq.Doe.Gov>; [Tam, Simon K.](#) <Simon.Tam@pjm.com>; [Bryson, Mike E.](#) <Michael.Bryson@pjm.com>; [Souder, David W.](#) <David.Souder@pjm.com>; [Glazer, Craig](#) <Craig.Glazer@pjm.com>
Cc: [Drake, Christopher](#) <Christopher.Drake@hq.doe.gov>; [O'Hara, Chris](#) <Chris.OHara@pjm.com>; [Mars, Jennifer A.](#) <Jennifer.Mars@pjm.com>; [Mills, Brian](#) <Brian.Mills@hq.doe.gov>; [Rosenbaum, Matthew](#) <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

The call is scheduled for Monday at 5:00. The call in numbers is included in the Outlook meeting invitation which you all should have received by now. If you need the numbers resent please let us know. Thank you. Steve

From: [Batra, Rakesh](#) [<mailto:Rakesh.Batra@Hq.Doe.Gov>]
Sent: Wednesday, November 22, 2017 12:57 PM
To: [Michael Regulinski](#); [Pincus, Steven](#); [Sharon L. Burr](#); [Miranda R Yost](#); [Rick R Linker](#); [Mike Barmer](#); [Mohammed Alfayyumi](#); [Konieczny, Katherine](#); [Tam, Simon K.](#); [Bryson, Mike E.](#); [Souder, David W.](#); [Glazer, Craig](#)
Cc: [Drake, Christopher](#); [O'Hara, Chris](#); [Mars, Jennifer A.](#); [Mills, Brian](#); [Rosenbaum, Matthew](#)
Subject: RE: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

External Email! Think before clicking links or attachments.

I guess Mr. Pincus didn't send out the call number. (b) (6)
 Rakesh

From: Michael Regulinski [<mailto:michael.regulinski@dominionenergy.com>]

Sent: Tuesday, November 21, 2017 5:07 PM

To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Pincus, Steven <Steven.Pincus@pjm.com>; Sharon L. Burr <sharon.l.burr@dominionenergy.com>; Miranda R Yost <Miranda.R.Yost@dominionenergy.com>; Rick R Linker <rick.r.linker@dominionenergy.com>; Mike Barmer <mike.barmer@dominionenergy.com>; Mohammed Alfayyoumi <mohammed.alfayyoumi@dominionenergy.com>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Tam, Simon K. <Simon.Tam@pjm.com>; Bryson, Mike E. <Michael.Bryson@pjm.com>; Souder, David W. <David.Souder@pjm.com>; Glazer, Craig <Craig.Glazer@pjm.com>

Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>; O'Hara, Chris <Chris.OHara@pjm.com>; Mars, Jennifer A. <Jennifer.Mars@pjm.com>; Mills, Brian <Brian.Mills@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: RE: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

I am available for a call tomorrow 11-12 EST. Please send a call in number. Thanks, Mike

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794

P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]

Sent: Tuesday, November 21, 2017 3:12 PM

To: Pincus, Steven; Michael Regulinski (Services - 6); Sharon L. Burr (Services - 6); Miranda R Yost (Services - 6); Rick R Linker (Services - 6); Mike Barmer (VirginiaPower - 1T); Mohammed Alfayyoumi (VirginiaPower - 1T); Konieczny, Katherine; Tam, Simon K.; Bryson, Mike E.; Souder, David W.; Glazer, Craig

Cc: Drake, Christopher; O'Hara, Chris; Mars, Jennifer A.; Mills, Brian; Rosenbaum, Matthew

Subject: [External] RE: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

I am available tomorrow morning before noon. Not available on Monday. Next availability is Tuesday, Nov 28, any time except 10-11am.

Rakesh

From: Pincus, Steven [<mailto:Steven.Pincus@pjm.com>]

Sent: Tuesday, November 21, 2017 2:57 PM

To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Michael Regulinski <michael.regulinski@dominionenergy.com>; Sharon L. Burr <sharon.l.burr@dominionenergy.com>; Miranda R Yost <Miranda.R.Yost@dominionenergy.com>; Rick R Linker <rick.r.linker@dominionenergy.com>; Mike Barmer <mike.barmer@dominionenergy.com>; Mohammed Alfayyoumi <mohammed.alfayyoumi@dominionenergy.com>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Tam, Simon K. <Simon.Tam@pjm.com>; Bryson, Mike E. <Michael.Bryson@pjm.com>; Souder, David W. <David.Souder@pjm.com>; Glazer, Craig <Craig.Glazer@pjm.com>

Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>; O'Hara, Chris

<Chris.OHara@pjm.com>; Mars, Jennifer A. <Jennifer.Mars@pjm.com>

Subject: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

PJM would like to schedule a conference with DOE staff and Dominion to discuss technical questions on the renewal application due next week. Please send my assistant Jenny Mars your availability for a call tomorrow afternoon or Monday.

Thank you and Happy Thanksgiving.

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

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From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]

Sent: Tuesday, November 21, 2017 10:48 AM

To: Michael Regulinski; Pincus, Steven; Sharon L. Burr; Miranda R Yost; Rick R Linker; Mike Barmer; Mohammed Alfayyumi

Cc: Konieczny, Katherine; Drake, Christopher

Subject: DOE Informal Question

External Email! Think before clicking links or attachments.

In preparations for renewal of Order No. 202-17-4, which expires in mid-December, now that PJM and/or Dominion will have enough data to answer the following question, we would like you to provide DOE a spreadsheet that reflects historical operations and emissions data for Units 1 and 2 for the years 2015-2017. Please provide the same categories of information (run time, MW, emissions, etc.) and in the same format used in Attachment 3 of the September Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4.

Order No. 202-17-4 was issued on September 14, 2017. By its own terms and by statute, it expires on **December 13, 2017**. Ordering paragraph D. states that "[i]f the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before this Order expires." (b) (5)

PJM's renewal request would therefore be due no later than **Wednesday, November 29**.

Thanks,

Rakesh Batra

202-586-1283

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transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.

From: Pincus, Steven
To: Glazer, Craig; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; michael.regulinski@dominionenergy.com; sharon.l.burr@dominionenergy.com; Konieczny, Katherine; Drake, Christopher; Mills, Brian; Rosenbaum, Matthew; Batra, Rakesh
Subject: RE: JM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions
Date: Monday, November 27, 2017 10:53:57 AM

DOE Representatives: (b) (5)

Thank you. Steve

-----Original Appointment-----

From: O'Hara, Chris

Sent: Wednesday, November 22, 2017 10:32 AM

To: O'Hara, Chris; Glazer, Craig; Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Egan, David M.; michael.regulinski@dominionenergy.com; sharon.l.burr@dominionenergy.com; Miranda.R.Yost@dominionenergy.com; mohammed.alfayyoumi@dominionenergy.com; mike.barmer@dominionenergy.com; rick.r.linker@dominionenergy.com; Katherine.Konieczny@Hq.Doe.Gov; Christopher.Drake@hq.doe.gov; Brian.Mills@hq.doe.gov; Matthew.Rosenbaum@hq.doe.gov; 'Rakesh.Batra@Hq.Doe.Gov'

Subject: JM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

When: Monday, November 27, 2017 5:00 PM-6:00 PM (UTC-05:00) Eastern Time (US & Canada).

Where: Conference Call

Participants: (b) (6)

Meeting Access ID: (b) (6)

AUTO DIAL WITH PASSCODE: (b) (6)

Jenny

From: Konieczny, Katherine
To: Pincus, Steven; Drake, Christopher; Mills, Brian; Rosenbaum, Matthew; Batra, Rakesh
Subject: RE: JM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions
Date: Monday, November 27, 2017 10:55:48 AM

(b) (6), (b) (5)

From: Pincus, Steven [mailto:Steven.Pincus@pjm.com]
Sent: Monday, November 27, 2017 10:54 AM
To: Glazer, Craig ; Bryson, Mike E. ; Souder, David W. ; Tam, Simon K. ; michael.regulinski@dominionenergy.com; sharon.l.burr@dominionenergy.com; Konieczny, Katherine ; Drake, Christopher ; Mills, Brian ; Rosenbaum, Matthew ; Batra, Rakesh
Subject: RE: JM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions
DOE Representatives: (b) (5)

Thank you. Steve

-----Original Appointment-----

From: O'Hara, Chris
Sent: Wednesday, November 22, 2017 10:32 AM
To: O'Hara, Chris; Glazer, Craig; Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Egan, David M.; michael.regulinski@dominionenergy.com; sharon.l.burr@dominionenergy.com; Miranda.R.Yost@dominionenergy.com; mohammed.alfayyumi@dominionenergy.com; mike.barmer@dominionenergy.com; rick.r.linker@dominionenergy.com; Katherine.Konieczny@Hq.Doe.Gov; Christopher.Drake@hq.doe.gov; Brian.Mills@hq.doe.gov; Matthew.Rosenbaum@hq.doe.gov; 'Rakesh.Batra@Hq.Doe.Gov'
Subject: JM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions
When: Monday, November 27, 2017 5:00 PM-6:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Conference Call
Participants: (b) (6)
Meeting Access ID: (b) (6)
AUTO DIAL WITH PASSCODE: (b) (6)
Jenny

From: Pincus, Steven
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Michael Regulinski (Services - 6); casey.roberts@sierraclub.org; Robinson, Evelyn
Subject: Order No. 202-17-4 Renewal Application Filing
Date: Wednesday, November 29, 2017 4:13:01 PM
Attachments: DOE Order 202-17-4 PJM Renewal Application Letter 11-29-17.pdf

Dear Secretary Perry:

PJM respectfully submits for filing a ninety (90) day Renewal Application in accordance with Section 202(c) of the Federal Power Act, the Department of Energy's Rules of Practice and Procedure and Order No. 202-17-4.

Please contact me if you have any questions.

Thank you for your consideration.

Respectfully,

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403



PJM Interconnection, L.L.C.
2750 Monroe Boulevard
Audubon, PA 19403

Steven R. Pincus
Associate General Counsel
T: (610) 666-4438 | F: (610) 666-8211
steven.pincus@pjm.com

November 29, 2017

The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: Order No. 202-17-4 Renewal Application Filing

Dear Secretary Perry:

Pursuant to Section 202(c) of the Federal Power Act (“FPA”),¹ Section 301(b) of the Department of Energy Organization Act,² the Department of Energy’s (“DOE”) Rules of Practice and Procedure³ and Order No. 202-17-4 issued on September 14, 2017 by the Secretary of Energy (“Secretary”) (the “September 14 Order”), PJM Interconnection, L.L.C. (“PJM”) respectfully submits a request for a 90-day renewal of the September 14 Order. PJM incorporates by reference PJM’s application submitted on June 13, 2017 (the “June 13 Application”) and all attachments and appendices thereto, and PJM’s August 24, 2017 renewal application (the “August 24 Application”) and all attachments and appendices thereto. PJM also incorporates by reference the various reports to DOE concerning the operations and emission data provided by PJM and Virginia Electric and Power Company (“Dominion Energy Virginia”) referenced below.

¹ 16 U.S.C. § 824a(c).

² 42 U.S.C. §§ 7101 and 7151(b).

³ 16 C.F.R. §§ 205.370, 205.371 and 205.372 and 205.373.

Background

In the June 13 Application, PJM stated the need to request renewals of the Order No. 202-17-2 issued on June 16, 2017 (the “June 16 Order”) on a rolling basis until the PJM ordered Regional Transmission Expansion Planning Process (“RTEPP”) Skiffes Creek Transmission Project is placed into service, which was at that time anticipated to be completed in 18-20 months once all permits are issued.⁴ In the June 16 Order, the Secretary determined “that an emergency exists in the Commonwealth of Virginia due to a shortage of electric energy, a shortage of facilities for the generation of electric energy, and other causes, and that issuance of this Order will meet the emergency and serve the public interest.”⁵ In doing so, the Secretary directed Dominion Energy Virginia to operate Yorktown Units 1 and 2 as directed by PJM as needed to address reliability issues for the initial 90-day period, June 16, 2017 to September 14, 2017, or any renewal thereof.⁶ The Secretary also directed PJM and Dominion Energy Virginia to develop and implement a dispatch methodology and submit it to the DOE upon implementation.⁷ The dispatch methodology was submitted by PJM on June 27, 2017.

In the August 24 Application, PJM submitted a request for a 90 day renewal of the June 16 Order. PJM requested an order of the Secretary under Section 202 (c) of the FPA which provides among other things that an emergency continues to exist in the Commonwealth of Virginia due to a shortage of electric energy, a shortage of facilities for the generation of electric

⁴ On October 12, 2017, PJM and Dominion Energy Virginia submitted a report updating the outage schedule for the Skiffes Creek Transmission Project with an extension of the construction schedule of approximately five and one-half months from December 30, 2018 to May 12, 2019.

⁵ June 16 Order page 1.

⁶ June 16 Order page 2.

⁷ June 16 Order page 2.

energy, and other causes, and that issuance of a renewal order (*i.e.* the September 14 Order) will meet the emergency and serve the public interest for another 90 renewal period (*i.e.* from September 14, 2017 to December 13, 2017).

In the September 14 Order, the Secretary determined “that an emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation and transmission of electric energy.”⁸ The Secretary granted PJM’s August 24 Application allowing operation of Yorktown Units 1 and 2, with certain modifications, for an additional 90-day period to expire on December 13, 2017.⁹ The Secretary’s directives required PJM and Dominion to “exhaust all reasonably and practically available resources, including demand response and behind-the-meter generation resources, prior to operating Yorktown Unit 1 and Yorktown Unit 2” consistent with “good utility practices” and in compliance with the dispatch methodology.¹⁰

⁸ September 14 Order page 1

⁹ September 14 Order page 1

¹⁰ September 14 Order page 2, paragraphs A and B. PJM has a detailed registration process as applied to demand response resources which are serving as capacity resources. PJM would utilize that information in applying this provision recognizing that: (i) the amount of registered demand response resources on the peninsula is limited; and (ii) during the renewal period covered by this application, certain demand response resources are available to PJM only in the summer period during the period. PJM has catalogued behind the meter resources based on data provided by the United States Energy Information Administration (“EIA”), Dominion and other sources. Although behind the meter resources are not subject to PJM’s direction, PJM works with Dominion to seek their assistance pursuant to the existing dispatch methodology. However, the DOE’s directive that PJM and Dominion Energy Virginia exhaust reasonably and practically available demand response and/or behind-the-meter resources applies only if exhausting such resources would lessen the need to operate the Yorktown Units 1 and/or 2 for reliability of the grid consistent with the dispatch methodology, PJM’s Governing Agreements and good utility practices. For example, if demand response and/or behind-the-meter resources would not provide needed reactive support, or otherwise not lessen the need to operate the Yorktown units for reliability, such resources would not be “reasonably and practically available” and operating the resources would not be consistent with the dispatch methodology, PJM’s Governing Agreements and good utility practices.

The September 14 Order directed PJM and Dominion Energy Virginia to report every two weeks during the term of the September 14 Order all dates on which Yorktown Units 1 and/or 2 are operated and associated air emissions and water usages for those dates.¹¹ The Secretary also directed reporting in the event the outage schedule or estimates changes from those presented in the August 24 Application. PJM and Dominion Energy Virginia submitted reports on September 28, 2017, August 22, 2017 and November 10, 2017, on the operation of Yorktown Units 1 and/or 2, and a report on October 12, 2017 revising the Skiffs Creek Transmission Project construction schedule and providing associated emission estimates.

The September 14 Order stated that “(i)f the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before (the September 14 Order) expires.”¹² As conditions creating the emergency remain substantially unchanged, this renewal application is due on November 29, 2017.

Renewal Request

As stated in the June 13 Application as revised by the August 24 Application, the Skiffes Creek Transmission Project was expected to be completed and placed into service approximately 18-20 months after receipt of all applicable permits. With issuance of the U.S. Army Corps of Engineers’ (“Army Corps”) permit on July 3, 2017, Dominion Energy Virginia started construction of the Skiffes Creek project on July 10, 2017. As reported on October 12, 2017, the Skiffs Creek Transmission Project is scheduled to be completed May 12, 2019. Thus, given the continued extended nature of the emergency, PJM respectfully submits that the emergency as set

¹¹ September 14 Order page 2, paragraph C.

¹² September 14 Order page 2, paragraph D.

forth in the June 13 Application and August 24 Application and as determined by the Secretary in the June 16 Order and September 14 continues to exist.


Therefore, PJM respectfully requests that the Secretary grant this renewal application and order the continued operation of Yorktown Units 1 and 2 to alleviate the emergency described in the June 13 Application, the August 24 Application and hereinabove prior to the expiration of the current order (*i.e.* December 13, 2017) under Section 202 (c) of the FPA. PJM request the requested renewal order provide as follows:

- (i) that an emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation and transmission of electric energy and that issuance of a renewal Order will meet the emergency and serve the public interest;
- (ii) from December 13, 2017 to March 13, 2018, Dominion Energy Virginia is directed to operate Yorktown Units 1 and 2 as directed by PJM as needed to maintain grid reliability or for other local area transmission issues;
- (iii) the limitations on operations ensure, to the maximum extent practicable, consistency with applicable laws and regulations, and the reporting requirements for operations and estimated emissions ensure transparency of implementation;
- (iv) consistent with the dispatch methodology submitted by PJM on June 27, 2017, good utility practice and the PJM Tariff, PJM and Dominion Energy Virginia shall exhaust all reasonably and practically available resources including demand response and identified behind-the-meter generation resources to the extent that

such resources address maintenance of grid reliability, prior to operating Yorktown Units 1 and/or 2;¹³

- (v) Dominion Energy Virginia shall continue to follow the dispatch methodology submitted by PJM on June 27, 2017;
- (vi) PJM and Dominion Energy Virginia shall report all dates on which Yorktown Units 1 and/or 2 are operated as well as the estimated emissions and water usage date for those dates within ten (10) business days of such operation; and
- (vii) in the event that the outage schedule or estimates change from those presented in this renewal application, within ten (10) business days PJM and Dominion Energy Virginia shall also provide updated outages schedules and associated Yorktown Units 1 and 2 emission estimates.

Respectfully submitted,



Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.

Craig Glazer
VP, Federal Government Policy
PJM Interconnection, L.L.C.

Cc (via electronic mail): Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Michael C. Regulinski, Dominion Energy Services, Inc.
Casey Roberts, Sierra Club Environmental Law Program

¹³ See Footnote 10.

From: [Jereza, Catherine](#)
To: [Batra, Rakesh](#); [Brian Mills](#); [Rosenbaum, Matthew](#)
Subject: FW: OE 202c related by Wed 12/13
Date: Monday, December 11, 2017 7:08:15 PM
Attachments: [Order 202-18-2 as of 12-11.docx](#)
[Order 202-18-2 Summary of Findings 12-11.docx](#)

Do we?

From: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Date: Monday, Dec 11, 2017, 1:40 PM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>, Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>
Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>
Subject: RE: OE 202c related by Wed 12/13

(b) (5)

-----Original Message-----

From: Jereza, Catherine
Sent: Monday, December 11, 2017 7:48 AM
To: Lucas, John T. ; Dannenfels, Marty ; Doone, Alison ; Loraine, Jennifer A. ; Turenne, William ; Haus, Bob ; Menezes, Mark
Cc: GC Concurrence Actions ; Faith, Jayne ; Habansky, Sarah ; Herron, Vernon ; Cunningham, Derrick ; Swisher, Vivian P. (CONTR) ; Hoffinan, Patricia ; Walker, Bruce ; Mills, Brian ; Smith, Julie A (OE) ; Rosenbaum, Matthew ; Batra, Rakesh ; Konieczny, Katherine ; Fibbe, George ; Lawrence, Shanika ; Bittner, Kathy (CONTR) ; Fisher, Travis
Subject: OE 202c related by Wed 12/13

(b) (5)

BACKGROUND: Order No. 202-17-4, the Federal Power Act section 202(c) emergency order in effect for PJM and Dominion, ensures reliability in the North Hampton Roads area of Virginia, but it expires on December 13. PJM has requested another 90-day order. By statute, these orders are limited to 90 days in duration, and PJM expects it will need consecutive 202(c) orders through May 2019. In the renewal order, the Department of Energy repeats most of the terms of the current order, mainly requiring that PJM direct the operation of two coal-fired generation units owned by Dominion as needed to address reliability issues. The purpose is to avoid load shedding in the impacted area, which could extend to 150,000 customers including critical infrastructure facilities. This renewal order cross-references a Summary of Findings explaining both the rationale for and legality of the decision to renew Order No. 202-17-4 for another 90 days.

RECOMMENDATION: (b) (5)

Thank you!
Katie

Catherine Jereza
Deputy Assistant Secretary, Transmission Permitting & Technical Assistance
Office of Electricity Delivery & Energy Reliability
U.S. Department of Energy
(o) 202.586.0334
(c)(b) (6)

Shamika Lawrence
Shamika.Lawrence@hq.doe.gov
202.586.4666

**** Please contact Shamika for all meeting and scheduling requests. ****

From: [Drake, Christopher](#)
To: [Fickel, Louise](#); [Batra, Rakesh](#)
Cc: [Konieczny, Katherine](#); [Mills, Brian](#); [Rosenbaum, Matthew](#)
Subject: RE: PJM OE 202c related
Date: Thursday, December 14, 2017 1:40:33 PM

Three of the documents Rakesh sent (CX, Order 202-18-2, and the Summary of Findings) are in addition to what I sent you earlier today. The fourth document is the same Renewal Application that you posted two weeks ago. Thank you for checking!

Chris Drake

Attorney-Adviser

U.S. Department of Energy, Office of General Counsel

Office of Electricity & Fossil Energy (GC-76)

Forrestal North, Room 6B-256

Tel. 202.586.2919

Christopher.Drake@hq.doe.gov

This communication may contain privileged or confidential material. Potential privileges include, but are not limited to, Attorney-Client, Attorney Work-Product, and Deliberative Process.

From: Fickel, Louise

Sent: Thursday, December 14, 2017 1:38 PM

To: Batra, Rakesh

Cc: Konieczny, Katherine ; Mills, Brian ; Drake, Christopher ; Rosenbaum, Matthew

Subject: RE: PJM OE 202c related

Thanks, Rakesh. Chris sent me four documents (b) (5)

Louise

From: Batra, Rakesh

Sent: Thursday, December 14, 2017 1:36 PM

To: Fickel, Louise <Louise.Fickel@Hq.Doe.Gov>

Cc: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: PJM OE 202c related

Importance: High

Louise:

Please find attached PJM 202(c) Order No. 202-18-2 related documents for web posting.

Kathy: (b) (5)

Thanks,

Rakesh

From: Bittner, Kathy (CONTR)
To: Batra, Rakesh
Cc: Jereza, Catherine
Subject: 2017-008921 - PJM renewal request
Date: Friday, December 01, 2017 2:03:39 PM
Attachments: 2017-008921 - Incoming.pdf

Good afternoon Rakesh,

I wasn't sure if you and Katie have received this correspondence already, but wanted to make sure. (b) (5)

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

Johnsen, Steven (MA)

From: Pincus, Steven <Steven.Pincus@pjm.com>
Sent: Wednesday, November 29, 2017 4:13 PM
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Michael Regulinski (Services - 6); casey.roberts@sierraclub.org; Robinson, Evelyn
Subject: Order No. 202-17-4 Renewal Application Filing
Attachments: DOE Order 202-17-4 PJM Renewal Application Letter 11-29-17.pdf

Dear Secretary Perry:

PJM respectfully submits for filing a ninety (90) day Renewal Application in accordance with Section 202(c) of the Federal Power Act, the Department of Energy's Rules of Practice and Procedure and Order No. 202-17-4.

Please contact me if you have any questions.

Thank you for your consideration.

Respectfully,

Steven R. Pincus
Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com
PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

11/29/2017 4:13 PM

From: Bittner, Kathy (CONTR)
To: Jereza, Catherine; Batra, Rakesh
Subject: RE: 2017-008921 - PJM renewal request
Date: Friday, December 01, 2017 2:14:43 PM

Thanks Katie.

-----Original Message-----

From: Jereza, Catherine
Sent: Friday, December 01, 2017 2:14 PM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: RE: 2017-008921 - PJM renewal request

Hi Kathy - The order must be issued on or before December 13, which is a Wed. (b) (5)

Thanks
Katie

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Friday, December 01, 2017 2:04 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: 2017-008921 - PJM renewal request

Good afternoon Rakesh,

I wasn't sure if you and Katie have received this correspondence already, but wanted to make sure. (b) (5)

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

From: Michael Regulinski
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; casey.roberts@sierraclub.org; Robinson, Evelyn; Pincus, Steven
Subject: Order No. 202-17-4 Report on Yorktown Operations
Date: Friday, December 01, 2017 3:12:42 PM
Attachments: Attachment 1 Yorktown Hourly Emissions Data VALUES 2015 thru 2017.xlsx
2017-12-01 Dominion Energy letter to Secretary Perry.pdf

Please see attached Yorktown Report requested by DOE staff submitted by PJM Interconnection and Dominion Energy Virginia. Please let me know if you have any questions. Thanks, Mike

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794

P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-01-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-01-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-02-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-02-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-03-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-04-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-04-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-05-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
ROUSE	01-05-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.10	0.00	0.1255	0.01255	1.67E-06	3.3068	3.31E-07	0.004781	0.000598
	01-05-2015 20	1	1	14.7	0.0000	0.0	0.0000	0.0	1.5	1.00	0.59	0.1255	1.84485	0.000246	3.3068	4.86E-05	0.702789	0.087849
	01-05-2015 21	0	0	15.1	0.0000	0.0	0.0000	0.0	1.6	1.00	0.60	0.1255	1.89505	0.000253	3.3068	4.99E-05	0.721912	0.090239
	01-05-2015 22	0	0	63.0	0.0063	0.4	0.0000	0.0	6.5	1.00	2.51	0.1255	7.9065	0.001054	3.3068	0.000208	3.011952	0.376494
	01-05-2015 23	0	0	165.8	0.0247	4.1	0.0000	0.0	17.0	1.00	6.61	0.1255	20.8079	0.002774	3.3068	0.000548	7.926693	0.990837
	01-06-2015 00	0	0	168.1	0.0327	5.5	0.0119	2.0	17.2	1.00	6.70	0.1255	21.09655	0.002813	3.3068	0.000556	8.036653	1.004582
	01-06-2015 01	0	0	168.8	0.0367	6.2	0.0361	6.1	17.3	1.00	6.73	0.1255	21.1844	0.002825	3.3068	0.000558	8.07012	1.008765
	01-06-2015 02	0	0	167.7	0.0400	6.7	0.0417	7.0	17.2	1.00	6.68	0.1255	21.04635	0.002806	3.3068	0.000555	8.01753	1.002191
	01-06-2015 03	0	0	165.3	0.0417	6.9	0.0387	6.4	17.0	1.00	6.59	0.1255	20.74515	0.002766	3.3068	0.000547	7.902789	0.987849
	01-06-2015 04	0	0	163.7	0.0422	6.9	0.0330	5.4	16.8	1.00	6.52	0.1255	20.54435	0.002739	3.3068	0.000541	7.826295	0.978287
	01-06-2015 05	0	0	163.5	0.0428	7.0	0.0361	5.9	16.8	1.00	6.51	0.1255	20.51925	0.002736	3.3068	0.000541	7.816733	0.977092
	01-06-2015 06	0	0	180.3	0.0488	8.8	0.0383	6.9	18.5	1.00	7.18	0.1255	22.62765	0.003017	3.3068	0.000596	8.61992	1.07749
	01-06-2015 07	0	0	178.7	0.0481	8.6	0.0325	5.8	18.3	1.00	7.12	0.1255	22.42685	0.00299	3.3068	0.000591	8.543426	1.067928
	01-06-2015 08	0	0	199.3	0.0522	10.4	0.0472	9.4	20.5	1.00	7.94	0.1255	25.01215	0.003335	3.3068	0.000659	9.528287	1.191036
	01-06-2015 09	0	0	202.0	0.0520	10.5	0.0421	8.5	20.7	1.00	8.05	0.1255	25.351	0.00338	3.3068	0.000668	9.657371	1.207171
ROUSE	01-06-2015 10	0	0	202.3	0.0530	10.9	0.0597	12.0	20.5	1.00	8.01	0.1255	25.23805	0.003365	3.3068	0.000665	9.614343	1.201793
	01-06-2015 11	0	0	208.6	0.0508	10.6	0.0748	15.6	21.4	1.00	8.31	0.1255	26.1793	0.003491	3.3068	0.00069	9.972908	1.246614
	01-06-2015 12	0	0	226.5	0.0552	12.5	0.0804	18.2	23.2	1.00	9.02	0.1255	28.42575	0.00379	3.3068	0.000749	10.82869	1.353586
	01-06-2015 13	0	16	416.3	0.2160	89.9	0.7444	309.9	42.7	1.00	16.59	0.1255	52.24565	0.006966	3.3068	0.001377	19.90279	2.487849
	01-06-2015 14	0	66	649.4	0.2670	173.4	1.2334	801.0	66.6	1.00	25.87	0.1255	81.4997	0.010866	3.3068	0.002147	31.04701	3.880876
	01-06-2015 15	0	99	980.1	0.3400	333.2	1.8222	1785.9	100.6	1.00	39.05	0.1255	123.0026	0.0164	3.3068	0.003241	46.85737	5.857171
	01-06-2015 16	31	118	1628.4	0.4490	731.2	1.9398	3158.8	167.1	1.00	64.88	0.1255	204.3642	0.027248	3.3068	0.005385	77.85179	9.731474
	01-06-2015 17	92	146	2276.2	0.4410	1003.8	2.0784	4730.9	233.5	1.00	90.69	0.1255	285.6631	0.038088	3.3068	0.007527	108.8223	13.60279
	01-06-2015 18	99	166	2472.5	0.4610	1139.8	2.0794	5141.4	253.7	1.00	98.51	0.1255	310.2988	0.041373	3.3068	0.008176	118.2072	14.7759
	01-06-2015 19	133	167	2771.1	0.4960	1374.5	2.0499	5680.5	284.3	1.00	110.40	0.1255	347.7731	0.046369	3.3068	0.009163	132.4829	16.56036
	01-06-2015 20	153	161	2834.1	0.4970	1408.5	2.0074	5689.1	290.8	1.00	112.91	0.1255	355.6796	0.047423	3.3068	0.009372	135.4948	16.93685

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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-06-2015 21	109	129	2176.1	0.5410	1177.3	1.9878	4325.7	223.3	1.00	86.70	0.1255	273.1006	0.036413	3.3068	0.007196	104.0367	13.00458
	01-06-2015 22	102	103	1896.0	0.4830	915.8	1.9656	3726.7	194.5	1.00	75.54	0.1255	237.948	0.031726	3.3068	0.00627	90.64542	11.33068
	01-06-2015 23	98	100	1859.4	0.4730	879.5	1.8824	3500.2	190.8	1.00	74.08	0.1255	233.3547	0.031113	3.3068	0.006149	88.89562	11.11195
	01-07-2015 00	105	109	1979.4	0.4540	898.6	1.8287	3619.8	203.1	1.00	78.86	0.1255	248.4147	0.033121	3.3068	0.006545	94.63267	11.82908
	01-07-2015 01	105	107	1974.8	0.4570	902.5	1.7623	3480.1	202.6	1.00	78.68	0.1255	247.8374	0.033044	3.3068	0.00653	94.41275	11.80159
	01-07-2015 02	104	105	1936.2	0.4640	898.4	1.7451	3378.8	198.7	1.00	77.14	0.1255	242.9931	0.032399	3.3068	0.006403	92.56733	11.57092
	01-07-2015 03	110	109	2048.9	0.4440	909.7	1.7334	3551.5	210.2	1.00	81.63	0.1255	257.137	0.034284	3.3068	0.006775	97.95538	12.24442
	01-07-2015 04	121	130	2314.7	0.4630	1071.7	1.7569	4066.8	237.5	1.00	92.22	0.1255	290.4949	0.038732	3.3068	0.007654	110.6629	13.83287
	01-07-2015 05	140	155	2669.3	0.5150	1374.7	1.8052	4818.7	273.9	1.00	106.35	0.1255	334.9972	0.044666	3.3068	0.008827	127.6159	15.95199
	01-07-2015 06	148	162	2829.0	0.5070	1434.3	1.8233	5158.1	290.3	1.00	112.71	0.1255	355.0395	0.047338	3.3068	0.009355	135.251	16.90637
	01-07-2015 07	159	172	3006.6	0.5110	1536.4	1.8329	5510.9	308.5	1.00	119.78	0.1255	377.3283	0.05031	3.3068	0.009942	143.7418	17.96773
	01-07-2015 08	160	173	3018.2	0.5190	1566.4	1.8399	5553.1	309.7	1.00	120.25	0.1255	378.7841	0.050504	3.3068	0.009981	144.2964	18.03705
	01-07-2015 09	160	172	3015.3	0.5230	1577.0	1.8396	5546.8	309.4	1.00	120.13	0.1255	378.4202	0.050455	3.3068	0.009971	144.1578	18.01972
	01-07-2015 10	160	172	3010.8	0.5240	1577.7	1.8308	5512.2	308.9	1.00	119.95	0.1255	377.8554	0.05038	3.3068	0.009956	143.9426	17.99283
	01-07-2015 11	160	172	3011.3	0.5160	1553.8	1.8154	5466.7	309.0	1.00	119.97	0.1255	377.9182	0.050388	3.3068	0.009958	143.9665	17.99582
	01-07-2015 12	160	173	3032.3	0.5150	1561.6	1.7895	5426.3	311.1	1.00	120.81	0.1255	380.5537	0.05074	3.3068	0.010027	144.9705	18.12131
	01-07-2015 13	160	173	3039.7	0.5160	1568.5	1.7723	5387.3	311.9	1.00	121.10	0.1255	381.4824	0.050864	3.3068	0.010052	145.3243	18.16554
	01-07-2015 14	160	173	3036.5	0.5190	1575.9	1.7696	5373.3	311.5	1.00	120.98	0.1255	381.0808	0.05081	3.3068	0.010041	145.1713	18.14641
	01-07-2015 15	160	173	3028.2	0.5210	1577.7	1.7883	5415.2	310.7	1.00	120.65	0.1255	380.0391	0.050671	3.3068	0.010014	144.7745	18.09681
	01-07-2015 16	160	173	3028.9	0.5200	1575.0	1.8036	5463.0	310.8	1.00	120.67	0.1255	380.127	0.050683	3.3068	0.010016	144.808	18.101
	01-07-2015 17	160	173	3033.5	0.5210	1580.5	1.7530	5317.6	311.2	1.00	120.86	0.1255	380.7043	0.05076	3.3068	0.010031	145.0279	18.12849
	01-07-2015 18	160	173	3017.6	0.5150	1554.1	1.7394	5248.8	309.6	1.00	120.22	0.1255	378.7088	0.050494	3.3068	0.009979	144.2677	18.03347
	01-07-2015 19	160	172	3017.2	0.5130	1547.8	1.7352	5235.4	309.6	1.00	120.21	0.1255	378.6586	0.050487	3.3068	0.009977	144.2486	18.03108
	01-07-2015 20	160	172	3022.7	0.5180	1565.8	1.6733	5057.9	310.1	1.00	120.43	0.1255	379.3489	0.050579	3.3068	0.009995	144.5116	18.06394
	01-07-2015 21	160	171	3015.7	0.4970	1498.8	1.6733	5046.1	309.4	1.00	120.15	0.1255	378.4704	0.050462	3.3068	0.009972	144.1769	18.02211
	01-07-2015 22	125	171	2706.1	0.5070	1372.0	1.6619	4497.3	277.6	1.00	107.81	0.1255	339.6156	0.045281	3.3068	0.008948	129.3753	16.17191
	01-07-2015 23	95	171	2452.4	0.5060	1240.9	1.6490	4044.1	251.6	1.00	97.71	0.1255	307.7762	0.041036	3.3068	0.00811	117.2462	14.65578
	01-08-2015 00	91	171	2434.7	0.5100	1241.7	1.6447	4004.3	249.8	1.00	97.00	0.1255	305.5549	0.04074	3.3068	0.008051	116.4	14.55
	01-08-2015 01	89	171	2413.0	0.5140	1240.3	1.6453	3970.1	247.6	1.00	96.14	0.1255	302.8315	0.040377	3.3068	0.007979	115.3625	14.42032
	01-08-2015 02	89	172	2432.6	0.5210	1267.4	1.6321	3970.2	249.6	1.00	96.92	0.1255	305.2913	0.040705	3.3068	0.008044	116.2996	14.53745
	01-08-2015 03	89	173	2418.3	0.5290	1279.3	1.6453	3978.9	248.1	1.00	96.35	0.1255	303.4967	0.040466	3.3068	0.007997	115.6159	14.45199
	01-08-2015 04	89	174	2450.8	0.5220	1279.3	1.6381	4014.6	251.5	1.00	97.64	0.1255	307.5754	0.041009	3.3068	0.008104	117.1697	14.64622
	01-08-2015 05	91	173	2460.3	0.4890	1203.1	1.6239	3995.3	252.4	1.00	98.02	0.1255	308.7677	0.041168	3.3068	0.008136	117.6239	14.70299
	01-08-2015 06	132	174	2837.2	0.4940	1401.6	1.7074	4844.2	291.1	1.00	113.04	0.1255	356.0686	0.047475	3.3068	0.009382	135.643	16.95538
	01-08-2015 07	157	175	3039.6	0.5020	1525.9	1.8038	5482.9	311.9	1.00	121.10	0.1255	381.4698	0.050862	3.3068	0.010051	145.3195	18.16494
	01-08-2015 08	62	174	2083.2	0.5220	1087.4	1.7969	3743.4	213.7	1.00	83.00	0.1255	261.4416	0.034858	3.3068	0.006889	99.59522	12.4494
	01-08-2015 09	0	176	1495.2	0.5480	819.4	1.7857	2670.0	153.4	1.00	59.57	0.1255	187.6476	0.025019	3.3068	0.004944	71.48367	8.935458
	01-08-2015 10	0	176	1508.1	0.5400	814.4	1.7714	2671.5	154.7	1.00	60.08	0.1255	189.2666	0.025235	3.3068	0.004987	72.1004	9.01255
	01-08-2015 11	0	175	1499.6	0.5470	820.3	1.7663	2648.7	153.9	1.00	59.75	0.1255	188.1998	0.025093	3.3068	0.004959	71.69402	8.961753
	01-08-2015 12	0	175	1559.3	0.5340	832.7	1.6878	2631.8	160.0	1.00	62.12	0.1255	195.6922	0.026092	3.3068	0.005156	74.54821	9.318526
	01-08-2015 13	0	175	1582.7	0.5340	845.2	1.6206	2565.0	162.4	1.00	63.06	0.1255	198.6289	0.026483	3.3068	0.005234	75.66693	9.458367
	01-08-2015 14	52	172	2019.3	0.5140	1037.9	1.7353	3504.1	207.2	1.00	80.45	0.1255	253.4222	0.033789	3.3068	0.006677	96.54024	12.06753
	01-08-2015 15	97	169	2464.7	0.4730	1165.8	1.8752	4621.7	252.9	1.00	98.20	0.1255	309.3199	0.041242	3.3068	0.00815	117.8343	14.72928
	01-08-2015 16	108	152	2399.5	0.4870	1168.6	1.8846	4522.2	246.2	1.00	95.60	0.1255	301.1373	0.040151	3.3068	0.007935	114.7171	14.33964
	01-08-2015 17	152	169	2913.9	0.4860	1416.2	1.8592	5417.4	299.0	1.00	116.09	0.1255	365.6945	0.048758	3.3068	0.009636	139.31	17.41375
	01-08-2015 18	155	173	2987.2	0.4880	1457.8	1.8179	5430.3	306.5	1.00	119.01	0.1255	374.8936	0.049985	3.3068	0.009878	142.8143	17.85179
	01-08-2015 19	156	174	2987.2	0.4880	1457.8	1.7907	5349.2	306.5	1.00	119.01	0.1255	374.8936	0.049985	3.3068	0.009878	142.8143	17.85179

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Date	Operate/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-08-2015 20	155	174	2982.5	0.4900	1461.4	1.7593	5247.1	306.0	1.00	118.82	0.1255	374.3038	0.049906	3.3068	0.009862	142.5896	17.82371
	01-08-2015 21	153	175	2974.6	0.4950	1472.4	1.7258	5133.5	305.2	1.00	118.51	0.1255	373.3123	0.049774	3.3068	0.009836	142.212	17.77649
	01-08-2015 22	154	173	2967.3	0.4970	1474.7	1.6990	5041.4	304.4	1.00	118.22	0.1255	372.3962	0.049652	3.3068	0.009812	141.8629	17.73287
	01-08-2015 23	142	147	2593.8	0.5340	1385.1	1.6909	4385.8	266.1	1.00	103.34	0.1255	325.5219	0.043402	3.3068	0.008577	124.0064	15.5008
	01-09-2015 00	131	147	2517.0	0.5400	1359.2	1.6819	4233.4	258.2	1.00	100.28	0.1255	315.8835	0.042117	3.3068	0.008323	120.3347	15.04183
	01-09-2015 01	130	145	2494.6	0.5470	1364.5	1.6591	4138.9	255.9	1.00	99.39	0.1255	313.0723	0.041742	3.3068	0.008249	119.2637	14.90797
	01-09-2015 02	117	142	2375.3	0.5620	1334.9	1.6425	3901.4	243.7	1.00	94.63	0.1255	298.1002	0.039746	3.3068	0.007855	113.5602	14.19502
	01-09-2015 03	123	140	2403.2	0.5560	1336.2	1.6456	3954.6	246.6	1.00	95.75	0.1255	301.6016	0.040213	3.3068	0.007947	114.894	14.36175
	01-09-2015 04	111	136	2254.6	0.5960	1343.7	1.6424	3703.0	231.3	1.00	89.82	0.1255	282.9523	0.037726	3.3068	0.007455	107.7896	13.47371
	01-09-2015 05	109	135	2245.3	0.5770	1295.5	1.6303	3660.6	230.4	1.00	89.45	0.1255	281.7852	0.037571	3.3068	0.007425	107.345	13.41813
	01-09-2015 06	140	154	2692.1	0.5190	1397.2	1.6440	4425.8	276.2	1.00	107.25	0.1255	337.8586	0.045047	3.3068	0.008902	128.706	16.08825
	01-09-2015 07	156	175	3007.4	0.4920	1479.6	1.6434	4942.4	308.6	1.00	119.82	0.1255	377.4287	0.050323	3.3068	0.009945	143.7801	17.97251
	01-09-2015 08	160	176	3057.3	0.4870	1488.9	1.6367	5003.9	313.7	1.00	121.80	0.1255	383.6912	0.051158	3.3068	0.01011	146.1657	18.27072
	01-09-2015 09	161	176	3065.7	0.4950	1517.5	1.6416	5032.8	314.5	1.00	122.14	0.1255	384.7454	0.051299	3.3068	0.010138	146.5673	18.32092
	01-09-2015 10	160	175	3059.3	0.5020	1535.8	1.6457	5034.8	313.9	1.00	121.88	0.1255	383.9422	0.051191	3.3068	0.010116	146.2614	18.28267
	01-09-2015 11	142	151	2646.9	0.5370	1421.4	1.6567	4385.0	271.6	1.00	105.45	0.1255	332.186	0.044291	3.3068	0.008753	126.545	15.81813
	01-09-2015 12	134	147	2570.1	0.5260	1351.9	1.6597	4265.6	263.7	1.00	102.39	0.1255	322.5476	0.043006	3.3068	0.008499	122.8733	15.35916
	01-09-2015 13	117	127	2252.5	0.5900	1329.0	1.6558	3729.8	231.1	1.00	89.74	0.1255	282.6888	0.037691	3.3068	0.007449	107.6892	13.46116
	01-09-2015 14	117	119	2212.5	0.5930	1312.0	1.6531	3657.4	227.0	1.00	88.15	0.1255	277.6688	0.037022	3.3068	0.007316	105.7769	13.22211
	01-09-2015 15	117	118	2180.9	0.6060	1321.6	1.6673	3636.3	223.8	1.00	86.89	0.1255	273.703	0.036493	3.3068	0.007212	104.2661	13.03327
	01-09-2015 16	122	128	2353.9	0.5690	1339.4	1.6567	3899.6	241.5	1.00	93.78	0.1255	295.4145	0.039388	3.3068	0.007784	112.5371	14.06713
	01-09-2015 17	149	161	2875.8	0.5060	1455.2	1.6760	4819.7	295.1	1.00	114.57	0.1255	360.9129	0.048121	3.3068	0.00951	137.4884	17.18606
	01-09-2015 18	156	169	3013.1	0.4950	1491.5	1.6864	5081.4	309.1	1.00	120.04	0.1255	378.1441	0.050418	3.3068	0.009964	144.0526	18.00657
	01-09-2015 19	153	168	2978.2	0.4920	1465.3	1.6894	5031.3	305.6	1.00	118.65	0.1255	373.7641	0.049834	3.3068	0.009848	142.3841	17.79801
	01-09-2015 20	145	151	2754.6	0.4850	1336.0	1.6792	4625.5	282.6	1.00	109.75	0.1255	345.7023	0.046093	3.3068	0.009109	131.694	16.46175
	01-09-2015 21	149	166	2908.8	0.4720	1373.0	1.6876	4909.0	298.4	1.00	115.89	0.1255	365.0544	0.048673	3.3068	0.009619	139.0661	17.38327
	01-09-2015 22	141	148	2658.7	0.4720	1254.9	1.6823	4472.6	272.8	1.00	105.92	0.1255	333.6669	0.044488	3.3068	0.008792	127.1092	15.88865
	01-09-2015 23	127	145	2522.7	0.5120	1291.6	1.6839	4248.1	258.8	1.00	100.51	0.1255	316.5989	0.042213	3.3068	0.008342	120.6072	15.0759
	01-10-2015 00	126	142	2487.2	0.5020	1248.6	1.6830	4186.0	255.2	1.00	99.09	0.1255	312.1436	0.041618	3.3068	0.008225	118.91	14.86375
	01-10-2015 01	130	148	2570.3	0.5060	1300.6	1.6895	4342.4	263.7	1.00	102.40	0.1255	322.5727	0.043009	3.3068	0.008499	122.8829	15.36036
	01-10-2015 02	124	141	2455.4	0.5100	1252.3	1.6942	4160.0	251.9	1.00	97.82	0.1255	308.1527	0.041086	3.3068	0.008119	117.3896	14.67371
	01-10-2015 03	132	145	2560.3	0.5020	1285.3	1.6870	4319.1	262.7	1.00	102.00	0.1255	321.3177	0.042842	3.3068	0.008466	122.4048	15.3006
	01-10-2015 04	147	160	2824.3	0.4850	1369.8	1.6858	4761.3	289.8	1.00	112.52	0.1255	354.4497	0.047259	3.3068	0.009339	135.0263	16.87829
	01-10-2015 05	145	157	2797.2	0.4750	1328.7	1.6640	4654.5	287.0	1.00	111.44	0.1255	351.0486	0.046806	3.3068	0.00925	133.7307	16.71633
	01-10-2015 06	153	168	2940.3	0.4790	1408.4	1.6736	4920.8	301.7	1.00	117.14	0.1255	369.0077	0.0492	3.3068	0.009723	140.5721	17.51511
	01-10-2015 07	154	169	2968.4	0.4840	1436.7	1.6688	4953.8	304.6	1.00	118.26	0.1255	372.5342	0.04967	3.3068	0.009816	141.9155	17.73944
	01-10-2015 08	155	175	3006.7	0.4820	1449.2	1.6771	5042.5	308.5	1.00	119.79	0.1255	377.3409	0.050311	3.3068	0.009942	143.7466	17.96833
	01-10-2015 09	155	175	3006.9	0.4850	1458.3	1.6774	5043.9	308.5	1.00	119.80	0.1255	377.366	0.050315	3.3068	0.009943	143.7562	17.96952
	01-10-2015 10	156	175	3012.3	0.4880	1470.0	1.6766	5050.3	309.1	1.00	120.01	0.1255	378.0437	0.050405	3.3068	0.009961	144.0143	18.00179
	01-10-2015 11	155	174	2993.4	0.4840	1448.8	1.6819	5034.5	307.1	1.00	119.26	0.1255	375.6717	0.050089	3.3068	0.009898	143.1108	17.88884
	01-10-2015 12	128	147	2501.9	0.5290	1323.5	1.6807	4204.9	256.7	1.00	99.68	0.1255	313.9885	0.041864	3.3068	0.008273	119.6127	14.95159
	01-10-2015 13	123	139	2400.1	0.5580	1339.3	1.6779	4027.1	246.3	1.00	95.62	0.1255	301.2126	0.040161	3.3068	0.007937	114.7458	14.34323
	01-10-2015 14	108	116	2079.9	0.5890	1225.1	1.6652	3463.5	213.4	1.00	82.86	0.1255	261.0275	0.034803	3.3068	0.006878	99.43745	12.42968
	01-10-2015 15	102	109	1972.7	0.5610	1106.7	1.6694	3293.2	202.4	1.00	78.59	0.1255	247.5739	0.033009	3.3068	0.006523	94.31235	11.78904
	01-10-2015 16	115	128	2263.6	0.5520	1249.5	1.6988	3845.4	232.2	1.00	90.18	0.1255	284.0818	0.037877	3.3068	0.007485	108.2199	13.52749
	01-10-2015 17	151	167	2934.7	0.4910	1440.9	1.6987	4985.3	301.1	1.00	116.92	0.1255	368.3049	0.049107	3.3068	0.009704	140.3044	17.53805
	01-10-2015 18	154	169	2962.3	0.4760	1410.1	1.6910	5009.3	303.9	1.00	118.02	0.1255	371.7687	0.049568	3.3068	0.009796	141.6239	17.70299

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-10-2015 19	154	169	2959.4	0.4760	1408.7	1.6931	5010.5	303.6	1.00	117.90	0.1255	371.4047	0.04952	3.3068	0.009786	141.4853	17.68566
	01-10-2015 20	154	169	2959.7	0.4720	1397.0	1.7029	5040.0	303.7	1.00	117.92	0.1255	371.4424	0.049525	3.3068	0.009787	141.4996	17.68745
	01-10-2015 21	154	169	2958.1	0.4780	1414.0	1.7091	5055.6	303.5	1.00	117.85	0.1255	371.2416	0.049498	3.3068	0.009782	141.4231	17.67789
	01-10-2015 22	159	173	3031.4	0.4710	1427.8	1.7122	5190.5	311.0	1.00	120.77	0.1255	380.4407	0.050725	3.3068	0.010024	144.9275	18.11594
	01-10-2015 23	148	167	2884.4	0.4570	1318.2	1.7215	4965.6	295.9	1.00	114.92	0.1255	361.9922	0.048265	3.3068	0.009538	137.8996	17.23745
	01-11-2015 00	152	158	2797.2	0.4680	1309.1	1.7390	4864.4	287.0	1.00	111.44	0.1255	351.0486	0.046806	3.3068	0.00925	133.7307	16.71633
	01-11-2015 01	159	170	3004.3	0.4520	1357.9	1.7304	5198.7	308.2	1.00	119.69	0.1255	377.0397	0.050271	3.3068	0.009935	143.6319	17.95398
	01-11-2015 02	160	175	3019.7	0.4550	1374.0	1.7383	5249.2	309.8	1.00	120.31	0.1255	378.9724	0.050529	3.3068	0.009985	144.3681	18.04602
	01-11-2015 03	160	175	3033.6	0.4560	1383.3	1.7280	5242.2	311.2	1.00	120.86	0.1255	380.7168	0.050761	3.3068	0.010031	145.0327	18.12908
	01-11-2015 04	160	175	3039.1	0.4570	1388.9	1.7243	5240.2	311.8	1.00	121.08	0.1255	381.4071	0.050853	3.3068	0.01005	145.2956	18.16195
	01-11-2015 05	160	174	3009.3	0.4580	1378.3	1.7310	5209.0	308.8	1.00	119.89	0.1255	377.6672	0.050355	3.3068	0.009951	143.8709	17.98386
	01-11-2015 06	160	173	2999.3	0.4600	1379.7	1.7377	5212.0	307.7	1.00	119.49	0.1255	376.4122	0.050187	3.3068	0.009918	143.3928	17.9241
	01-11-2015 07	160	174	3055.2	0.4520	1381.0	1.7377	5308.9	313.5	1.00	121.72	0.1255	383.4276	0.051123	3.3068	0.010103	146.0653	18.25817
	01-11-2015 08	161	175	3069.5	0.4560	1399.7	1.7434	5351.5	314.9	1.00	122.29	0.1255	385.2223	0.051362	3.3068	0.01015	146.749	18.34363
	01-11-2015 09	160	175	3058.8	0.4600	1407.0	1.7443	5335.6	313.8	1.00	121.86	0.1255	383.8794	0.051183	3.3068	0.010115	146.2375	18.27968
	01-11-2015 10	145	152	2693.8	0.4700	1266.1	1.7310	4662.9	276.4	1.00	107.32	0.1255	338.0719	0.045076	3.3068	0.008908	128.7873	16.09841
	01-11-2015 11	109	118	2096.4	0.5480	1148.8	1.7105	3585.8	215.1	1.00	83.52	0.1255	263.0982	0.035079	3.3068	0.006932	100.2263	12.52829
	01-11-2015 12	101	108	1967.8	0.5460	1074.4	1.6946	3334.6	201.9	1.00	78.40	0.1255	246.9589	0.032927	3.3068	0.006507	94.07809	11.75976
	01-11-2015 13	99	104	1912.3	0.5450	1042.2	1.6897	3231.2	196.2	1.00	76.19	0.1255	239.9937	0.031999	3.3068	0.006324	91.4247	11.42809
	01-11-2015 14	101	104	1944.8	0.5320	1034.6	1.6910	3288.7	199.5	1.00	77.48	0.1255	244.0724	0.032542	3.3068	0.006431	92.97849	11.62231
	01-11-2015 15	102	105	1960.5	0.5180	1015.5	1.7000	3332.9	201.2	1.00	78.11	0.1255	246.0428	0.032805	3.3068	0.006483	93.72908	11.71614
	01-11-2015 16	106	112	2068.9	0.5110	1057.2	1.7091	3536.0	212.3	1.00	82.43	0.1255	259.647	0.034619	3.3068	0.006841	98.91155	12.36394
	01-11-2015 17	141	159	2776.6	0.4890	1357.8	1.7369	4822.7	284.9	1.00	110.62	0.1255	348.4633	0.046461	3.3068	0.009182	132.7458	16.59323
	01-11-2015 18	148	161	2825.6	0.4890	1381.7	1.7376	4909.7	289.9	1.00	112.57	0.1255	354.6128	0.047281	3.3068	0.009344	135.0884	16.88606
	01-11-2015 19	122	129	2327.6	0.5420	1261.6	1.7159	3993.9	238.8	1.00	92.73	0.1255	292.1138	0.038948	3.3068	0.007697	111.2797	13.90996
	01-11-2015 20	101	104	1888.5	0.5340	1008.5	1.7061	3221.9	193.8	1.00	75.24	0.1255	237.0068	0.0316	3.3068	0.006245	90.28685	11.28586
	01-11-2015 21	122	136	2408.9	0.5200	1252.6	1.7230	4150.6	247.2	1.00	95.97	0.1255	302.317	0.040308	3.3068	0.007966	115.1665	14.39582
	01-11-2015 22	106	114	2042.8	0.5670	1158.3	1.7250	3523.9	209.6	1.00	81.39	0.1255	256.3714	0.034182	3.3068	0.006755	97.66375	12.20797
	01-11-2015 23	102	106	1947.4	0.4830	940.6	1.7279	3365.0	199.8	1.00	77.59	0.1255	244.3987	0.032586	3.3068	0.00644	93.10279	11.63785
	01-12-2015 00	100	109	1961.7	0.4760	933.8	1.7410	3415.3	201.3	1.00	78.16	0.1255	246.1934	0.032825	3.3068	0.006487	93.78645	11.72331
	01-12-2015 01	100	102	1895.7	0.4810	911.8	1.7430	3304.2	194.5	1.00	75.53	0.1255	237.9104	0.031721	3.3068	0.006269	90.63108	11.32888
	01-12-2015 02	99	100	1888.5	0.4720	891.4	1.7414	3288.6	193.8	1.00	75.24	0.1255	237.0068	0.0316	3.3068	0.006245	90.28685	11.28586
	01-12-2015 03	98	99	1874.2	0.4770	894.0	1.7470	3274.2	192.3	1.00	74.67	0.1255	235.2121	0.031361	3.3068	0.006198	89.60319	11.2004
	01-12-2015 04	99	100	1880.4	0.4660	876.3	1.7404	3272.6	192.9	1.00	74.92	0.1255	235.9902	0.031465	3.3068	0.006218	89.8996	11.23745
	01-12-2015 05	99	100	1893.8	0.4600	871.1	1.7209	3259.1	194.3	1.00	75.45	0.1255	237.6719	0.031689	3.3068	0.006262	90.54024	11.31753
	01-12-2015 06	121	130	2358.6	0.4560	1075.5	1.7469	4120.3	242.0	1.00	93.97	0.1255	296.0043	0.039467	3.3068	0.007799	112.7618	14.09522
	01-12-2015 07	153	168	2972.9	0.4850	1441.9	1.7398	5172.3	305.0	1.00	118.44	0.1255	373.099	0.049746	3.3068	0.009831	142.1307	17.76633
	01-12-2015 08	153	169	2983.2	0.4690	1399.1	1.7293	5158.7	306.1	1.00	118.85	0.1255	374.3916	0.049918	3.3068	0.009865	142.6231	17.82789
	01-12-2015 09	154	169	2963.3	0.4630	1372.0	1.7413	5159.9	304.0	1.00	118.06	0.1255	371.8942	0.049585	3.3068	0.009799	141.6717	17.70896
	01-12-2015 10	149	166	2901.2	0.4540	1317.1	1.7298	5018.5	297.7	1.00	115.59	0.1255	364.1006	0.048546	3.3068	0.009594	138.7028	17.33785
	01-12-2015 11	150	154	2790.6	0.4590	1280.9	1.7440	4866.8	286.3	1.00	111.18	0.1255	350.2203	0.046695	3.3068	0.009228	133.4151	16.67689
	01-12-2015 12	149	155	2802.9	0.4610	1292.1	1.7449	4890.7	287.6	1.00	111.67	0.1255	351.764	0.046901	3.3068	0.009259	134.0032	16.7504
	01-12-2015 13	137	147	2604.9	0.4620	1203.5	1.7465	4549.5	267.3	1.00	103.78	0.1255	326.915	0.043588	3.3068	0.008614	124.5371	15.56713
	01-12-2015 14	122	128	2318.5	0.5200	1205.6	1.7526	4063.3	237.9	1.00	92.37	0.1255	290.9718	0.038796	3.3068	0.007667	110.8446	13.85558
	01-12-2015 15	123	129	2341.5	0.5310	1243.3	1.7541	4107.2	240.2	1.00	93.29	0.1255	293.8583	0.03918	3.3068	0.007743	111.9442	13.99303
	01-12-2015 16	129	138	2476.0	0.5040	1247.9	1.7454	4321.6	254.0	1.00	98.65	0.1255	310.738	0.041431	3.3068	0.008188	118.3745	14.79681
	01-12-2015 17	138	150	2677.0	0.4810	1287.6	1.7523	4690.8	274.7	1.00	106.65	0.1255	335.9635	0.044794	3.3068	0.008852	127.9841	15.99801

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-12-2015 18	157	168	2999.9	0.4500	1350.0	1.7603	5280.8	307.8	1.00	119.52	0.1255	376.4875	0.050198	3.3068	0.00992	143.4215	17.92769
	01-12-2015 19	152	165	2916.3	0.4610	1344.4	1.7553	5119.0	299.2	1.00	116.19	0.1255	365.9957	0.048799	3.3068	0.009644	139.4247	17.42809
	01-12-2015 20	135	147	2592.7	0.4780	1239.3	1.7462	4527.4	266.0	1.00	103.29	0.1255	325.3839	0.043384	3.3068	0.008573	123.9538	15.49422
	01-12-2015 21	125	141	2455.1	0.5170	1269.3	1.7458	4286.0	251.9	1.00	97.81	0.1255	308.1151	0.041081	3.3068	0.008118	117.3753	14.67191
	01-12-2015 22	126	144	2474.0	0.5120	1266.7	1.7659	4368.9	253.8	1.00	98.57	0.1255	310.487	0.041398	3.3068	0.008181	118.2789	14.78486
	01-12-2015 23	118	112	2141.5	0.5650	1209.9	1.7807	3813.3	219.7	1.00	85.32	0.1255	268.7583	0.035834	3.3068	0.007081	102.3825	12.79781
	01-13-2015 00	101	104	1919.3	0.5540	1063.3	1.7723	3401.5	196.9	1.00	76.47	0.1255	240.8722	0.032116	3.3068	0.006347	91.75936	11.46992
	01-13-2015 01	102	105	1950.5	0.5290	1031.8	1.7725	3457.2	200.1	1.00	77.71	0.1255	244.7878	0.032638	3.3068	0.00645	93.251	11.65637
	01-13-2015 02	104	107	1977.7	0.5210	1030.4	1.7699	3500.4	202.9	1.00	78.79	0.1255	248.2014	0.033093	3.3068	0.00654	94.55139	11.81892
	01-13-2015 03	98	100	1871.7	0.5410	1012.6	1.7580	3290.5	192.0	1.00	74.57	0.1255	234.8984	0.031319	3.3068	0.006189	89.48367	11.18546
	01-13-2015 04	98	99	1862.3	0.5370	1000.1	1.7564	3271.0	191.1	1.00	74.20	0.1255	233.7187	0.031162	3.3068	0.006158	89.03426	11.12928
	01-13-2015 05	107	110	2066.7	0.4940	1020.9	1.7361	3588.1	212.0	1.00	82.34	0.1255	259.3709	0.034582	3.3068	0.006834	98.80637	12.3508
	01-13-2015 06	146	161	2872.6	0.4790	1376.0	1.7303	4970.6	294.7	1.00	114.45	0.1255	360.5113	0.048067	3.3068	0.009499	137.3355	17.16693
	01-13-2015 07	153	168	2974.4	0.4790	1424.7	1.7129	5094.9	305.2	1.00	118.50	0.1255	373.2872	0.049771	3.3068	0.009836	142.2024	17.7753
	01-13-2015 08	152	167	2944.3	0.4750	1398.5	1.7117	5039.9	302.1	1.00	117.30	0.1255	369.5097	0.049267	3.3068	0.009736	140.7633	17.59542
	01-13-2015 09	154	168	2967.9	0.4680	1389.0	1.7046	5059.2	304.5	1.00	118.24	0.1255	372.4715	0.049662	3.3068	0.009814	141.8916	17.73645
	01-13-2015 10	151	163	2895.6	0.4640	1343.6	1.6917	4898.6	297.1	1.00	115.36	0.1255	363.3978	0.048452	3.3068	0.009575	138.4351	17.30438
	01-13-2015 11	150	161	2876.4	0.4740	1363.4	1.6854	4848.0	295.1	1.00	114.60	0.1255	360.9882	0.048131	3.3068	0.009512	137.5171	17.18964
	01-13-2015 12	147	159	2830.5	0.4740	1341.7	1.6760	4743.8	290.4	1.00	112.77	0.1255	355.2278	0.047363	3.3068	0.00936	135.3227	16.91534
	01-13-2015 13	144	154	2754.9	0.4840	1333.4	1.6787	4624.6	282.7	1.00	109.76	0.1255	345.74	0.046098	3.3068	0.00911	131.7084	16.46355
	01-13-2015 14	134	150	2648.8	0.4950	1311.2	1.6820	4455.4	271.8	1.00	105.53	0.1255	332.4244	0.044323	3.3068	0.008759	126.6359	15.82948
	01-13-2015 15	146	86	2232.5	0.4650	1038.1	1.6945	3783.0	229.1	1.00	88.94	0.1255	280.1788	0.037357	3.3068	0.007382	106.7331	13.34163
	01-13-2015 16	154	0	1499.9	0.4230	634.5	1.7032	2554.6	153.9	1.00	59.76	0.1255	188.2375	0.025098	3.3068	0.00496	71.70837	8.963546
	01-13-2015 17	155	0	1462.1	0.4150	606.8	1.6901	2471.1	150.0	1.00	58.25	0.1255	183.4936	0.024465	3.3068	0.004835	69.9012	8.737649
	01-13-2015 18	159	0	1591.9	0.4110	654.3	1.6019	2550.0	163.3	1.00	63.42	0.1255	199.7835	0.026637	3.3068	0.005264	76.10677	9.513347
	01-13-2015 19	160	0	1593.6	0.4160	662.9	1.5994	2548.8	163.5	1.00	63.49	0.1255	199.9968	0.026666	3.3068	0.00527	76.18805	9.523506
	01-13-2015 20	160	0	1601.9	0.4280	685.6	1.6032	2568.2	164.4	1.00	63.82	0.1255	201.0385	0.026805	3.3068	0.005297	76.58486	9.573108
	01-13-2015 21	160	0	1587.8	0.4300	682.8	1.5981	2537.5	162.9	1.00	63.26	0.1255	199.2689	0.026569	3.3068	0.00525	75.91076	9.488845
	01-13-2015 22	155	0	1523.0	0.4300	654.9	1.5868	2416.7	156.3	1.00	60.68	0.1255	191.1365	0.025484	3.3068	0.005036	72.81275	9.101594
	01-13-2015 23	157	7	1632.1	0.4340	708.3	1.5555	2538.7	167.5	1.00	65.02	0.1255	204.8286	0.02731	3.3068	0.005397	78.02869	9.753586
	01-14-2015 00	157	67	2169.1	0.4370	947.9	1.6165	3506.3	222.5	1.00	86.42	0.1255	272.2221	0.036296	3.3068	0.007173	103.702	12.96275
	01-14-2015 01	159	112	2568.7	0.4410	1132.8	1.7134	4401.1	263.6	1.00	102.34	0.1255	322.3719	0.042982	3.3068	0.008494	122.8064	15.3508
	01-14-2015 02	151	158	2874.1	0.4750	1365.2	1.7280	4966.4	294.9	1.00	114.51	0.1255	360.6996	0.048093	3.3068	0.009504	137.4072	17.1759
	01-14-2015 03	154	164	2926.9	0.3740	1094.7	1.7436	5103.4	300.3	1.00	116.61	0.1255	367.326	0.048976	3.3068	0.009679	139.9315	17.49143
	01-14-2015 04	158	176	3056.2	0.3550	1085.0	1.7545	5362.1	313.6	1.00	121.76	0.1255	383.5531	0.05114	3.3068	0.010106	146.1131	18.26414
	01-14-2015 05	157	175	3047.6	0.3510	1069.7	1.7357	5289.6	312.7	1.00	121.42	0.1255	382.4738	0.050996	3.3068	0.010078	145.702	18.21275
	01-14-2015 06	160	175	3063.0	0.3530	1081.2	1.7487	5356.3	314.3	1.00	122.03	0.1255	384.4065	0.051253	3.3068	0.010129	146.4382	18.30478
	01-14-2015 07	161	176	3079.2	0.3550	1093.1	1.7493	5386.4	315.9	1.00	122.68	0.1255	386.4396	0.051524	3.3068	0.010182	147.2127	18.40159
	01-14-2015 08	161	176	3108.2	0.3520	1094.1	1.7342	5390.1	318.9	1.00	123.83	0.1255	390.0791	0.05201	3.3068	0.010278	148.5992	18.5749
	01-14-2015 09	161	176	3082.6	0.3530	1088.2	1.7533	5404.8	316.3	1.00	122.81	0.1255	386.8663	0.051581	3.3068	0.010193	147.3753	18.42191
	01-14-2015 10	160	176	3080.2	0.3530	1087.3	1.7588	5417.6	316.0	1.00	122.72	0.1255	386.5651	0.051541	3.3068	0.010186	147.2606	18.40757
	01-14-2015 11	159	176	3064.6	0.3450	1057.3	1.7658	5411.5	314.4	1.00	122.10	0.1255	384.6073	0.05128	3.3068	0.010134	146.5147	18.31434
	01-14-2015 12	160	176	3070.5	0.3460	1062.4	1.7684	5429.9	315.0	1.00	122.33	0.1255	385.3478	0.051379	3.3068	0.010153	146.7968	18.3496
	01-14-2015 13	160	176	3071.3	0.3440	1056.5	1.7679	5429.7	315.1	1.00	122.36	0.1255	385.4482	0.051392	3.3068	0.010156	146.8351	18.35438
	01-14-2015 14	160	176	3069.0	0.3350	1028.1	1.7649	5416.6	314.9	1.00	122.27	0.1255	385.1595	0.051354	3.3068	0.010148	146.7251	18.34064
	01-14-2015 15	160	175	3062.2	0.3340	1022.8	1.7725	5427.7	314.2	1.00	122.00	0.1255	384.3061	0.05124	3.3068	0.010126	146.4	18.3
	01-14-2015 16	160	176	3061.0	0.3350	1025.4	1.7838	5460.3	314.1	1.00	121.95	0.1255	384.1555	0.05122	3.3068	0.010122	146.3426	18.29283

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Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-14-2015 17	161	175	3073.5	0.3490	1072.7	1.7745	5453.9	315.3	1.00	122.45	0.1255	385.7243	0.051429	3.3068	0.010163	146.9402	18.36753
	01-14-2015 18	161	174	3034.8	0.3550	1077.4	1.7793	5399.9	311.4	1.00	120.91	0.1255	380.8674	0.050782	3.3068	0.010035	145.09	18.13625
	01-14-2015 19	161	173	3027.4	0.3550	1074.7	1.7855	5405.3	310.6	1.00	120.61	0.1255	379.9387	0.050658	3.3068	0.010011	144.7363	18.09203
	01-14-2015 20	160	170	3014.8	0.3620	1091.4	1.7644	5319.2	309.3	1.00	120.11	0.1255	378.3574	0.050447	3.3068	0.009969	144.1339	18.01673
	01-14-2015 21	154	170	2959.2	0.3490	1032.8	1.7589	5204.8	303.6	1.00	117.90	0.1255	371.3796	0.049516	3.3068	0.009785	141.4757	17.68446
	01-14-2015 22	133	168	2749.9	0.3540	973.5	1.7360	4773.9	282.1	1.00	109.56	0.1255	345.1125	0.046014	3.3068	0.009093	131.4693	16.43367
	01-14-2015 23	116	163	2570.0	0.3580	920.1	1.7388	4468.6	263.7	1.00	102.39	0.1255	322.535	0.043004	3.3068	0.008498	122.8685	15.35857
	01-15-2015 00	141	153	2679.5	0.3430	919.1	1.7333	4644.4	274.9	1.00	106.75	0.1255	336.2773	0.044836	3.3068	0.00886	128.1036	16.01295
	01-15-2015 01	142	153	2673.7	0.3500	935.8	1.7396	4651.3	274.3	1.00	106.52	0.1255	335.5494	0.044739	3.3068	0.008841	127.8263	15.97829
	01-15-2015 02	123	131	2355.7	0.3510	826.9	1.7284	4071.6	241.7	1.00	93.85	0.1255	295.6404	0.039418	3.3068	0.00779	112.5231	14.07789
	01-15-2015 03	130	131	2416.7	0.3500	845.8	1.7364	4196.4	248.0	1.00	96.28	0.1255	303.2959	0.040439	3.3068	0.007991	115.5394	14.44243
	01-15-2015 04	129	131	2400.0	0.3630	871.2	1.7377	4170.5	246.2	1.00	95.62	0.1255	301.2	0.040159	3.3068	0.007936	114.741	14.34263
	01-15-2015 05	148	157	2840.0	0.3470	985.5	1.7277	4906.6	291.4	1.00	113.15	0.1255	356.42	0.047522	3.3068	0.009391	135.7769	16.97211
	01-15-2015 06	160	169	3024.7	0.3750	1134.3	1.7452	5278.6	310.3	1.00	120.51	0.1255	379.5999	0.050613	3.3068	0.010002	144.6072	18.0759
	01-15-2015 07	161	172	3039.4	0.4010	1218.8	1.7525	5326.4	311.8	1.00	121.09	0.1255	381.4447	0.050858	3.3068	0.010051	145.31	18.16375
	01-15-2015 08	158	170	3025.9	0.3920	1186.2	1.7443	5278.0	310.5	1.00	120.55	0.1255	379.7505	0.050633	3.3068	0.010006	144.6645	18.08307
	01-15-2015 09	157	167	2953.5	0.3820	1128.2	1.7668	5218.2	303.0	1.00	117.67	0.1255	370.6643	0.049421	3.3068	0.009767	141.2032	17.6504
	01-15-2015 10	156	161	2886.6	0.3680	1062.3	1.7739	5120.5	296.2	1.00	115.00	0.1255	362.2683	0.048302	3.3068	0.009545	138.0048	17.2506
	01-15-2015 11	129	124	2319.0	0.3640	844.1	1.7648	4092.5	237.9	1.00	92.39	0.1255	291.0345	0.038804	3.3068	0.007668	110.8585	13.85857
	01-15-2015 12	103	104	1938.5	0.4110	796.7	1.7646	3420.6	198.9	1.00	77.23	0.1255	243.2818	0.032437	3.3068	0.00641	92.67729	11.58466
	01-15-2015 13	111	118	2149.9	0.3630	780.4	1.7537	3770.2	220.6	1.00	85.65	0.1255	269.8125	0.035974	3.3068	0.007109	102.7841	12.84801
	01-15-2015 14	99	104	1920.5	0.3980	764.4	1.7662	3391.9	197.0	1.00	76.51	0.1255	241.0228	0.032136	3.3068	0.006351	91.81673	11.47709
	01-15-2015 15	104	114	2046.5	0.3740	765.4	1.7663	3614.8	210.0	1.00	81.53	0.1255	256.8358	0.034244	3.3068	0.006767	97.84064	12.23008
	01-15-2015 16	98	101	1895.2	0.3930	744.8	1.7655	3346.0	194.5	1.00	75.51	0.1255	237.8476	0.031713	3.3068	0.006267	90.60717	11.3259
	01-15-2015 17	123	135	2420.7	0.3640	881.1	1.7836	4317.6	248.4	1.00	96.44	0.1255	303.7979	0.040506	3.3068	0.008005	115.7307	14.46633
	01-15-2015 18	154	161	2864.0	0.3810	1091.2	1.7810	5100.8	293.8	1.00	114.10	0.1255	359.432	0.047924	3.3068	0.009471	136.9243	17.11554
	01-15-2015 19	151	152	2771.1	0.3690	1022.5	1.7789	4929.5	284.3	1.00	110.40	0.1255	347.7731	0.046369	3.3068	0.009163	132.4829	16.55036
	01-15-2015 20	146	149	2676.8	0.3640	974.4	1.7788	4761.4	274.6	1.00	106.65	0.1255	335.9384	0.044791	3.3068	0.008852	127.9745	15.99681
	01-15-2015 21	108	109	2016.7	0.5390	1087.0	1.7787	3587.1	206.9	1.00	80.35	0.1255	253.0959	0.033746	3.3068	0.006669	96.41594	12.05199
	01-15-2015 22	98	99	1845.0	0.4350	802.6	1.7694	3264.5	189.3	1.00	73.51	0.1255	231.5475	0.030873	3.3068	0.006101	88.20717	11.0259
	01-15-2015 23	98	99	1864.6	0.4310	803.6	1.7700	3300.4	191.3	1.00	74.29	0.1255	234.0073	0.0312	3.3068	0.006166	89.14422	11.14303
	01-16-2015 00	92	99	1790.1	0.4180	748.3	1.6813	3009.7	183.7	1.00	71.32	0.1255	224.6576	0.029954	3.3068	0.005919	85.58247	10.69781
	01-16-2015 01	30	90	1104.2	0.4550	502.4	1.4805	1634.8	113.3	1.00	43.99	0.1255	138.5771	0.018477	3.3068	0.003651	52.79044	6.598805
	01-16-2015 02	0	87	861.2	0.3760	323.8	1.4208	1223.6	88.4	1.00	34.31	0.1255	108.0806	0.014411	3.3068	0.002848	41.17291	5.146614
	01-16-2015 03	0	85	898.9	0.3600	323.5	1.4369	1291.6	92.2	1.00	35.81	0.1255	112.812	0.015041	3.3068	0.002972	42.9753	5.371912
	01-16-2015 04	0	85	904.8	0.3600	325.7	1.4419	1304.6	92.8	1.00	36.05	0.1255	113.5524	0.01514	3.3068	0.002992	43.25737	5.407171
	01-16-2015 05	0	85	933.6	0.3540	330.5	1.4093	1315.7	95.8	1.00	37.20	0.1255	117.1668	0.015622	3.3068	0.003087	44.63426	5.579283
	01-16-2015 06	0	81	763.8	0.3490	266.6	1.4351	1096.1	78.4	1.00	30.43	0.1255	95.8569	0.012781	3.3068	0.002526	36.51633	4.564542
	01-16-2015 07	0	5	87.0	0.1630	14.2	1.0756	93.6	8.9	0.25	3.47	0.1255	10.91536	0.001455	3.3068	0.000288	4.158167	0.519771
	01-16-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-16-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-16-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-17-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-18-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-18-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-19-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-20-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-20-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-21-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-22-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-22-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 13	0	0	2.4	0.0000	0.0	0.0000	0.0	0.3	0.17	0.10	0.1255	0.302957	4.04E-05	3.3068	7.98E-06	0.11541	0.014426
	01-23-2015 14	0	0	12.9	0.0000	0.0	0.0000	0.0	1.3	0.88	0.52	0.1255	1.623468	0.000216	3.3068	4.28E-05	0.618454	0.077307
	01-23-2015 15	0	0	29.9	0.0000	0.0	0.0000	0.0	3.1	1.00	1.19	0.1255	3.75245	0.0005	3.3068	9.89E-05	1.429482	0.178685
	01-23-2015 16	1	1	45.3	0.0022	0.1	0.0000	0.0	4.6	1.00	1.80	0.1255	5.68515	0.000758	3.3068	0.00015	2.165737	0.270717
	01-23-2015 17	0	0	17.4	0.0033	0.1	0.0000	0.0	1.8	0.58	0.69	0.1255	2.1837	0.000291	3.3068	5.75E-05	0.831873	0.103984
	01-23-2015 18	0	0	10.4	0.0000	0.0	0.0000	0.0	1.1	0.73	0.42	0.1255	1.310095	0.000175	3.3068	3.45E-05	0.499076	0.062384
	01-23-2015 19	0	0	8.0	0.0000	0.0	0.0000	0.0	0.8	1.00	0.32	0.1255	1.004	0.000134	3.3068	2.65E-05	0.38247	0.047809
	01-23-2015 20	0	0	16.8	0.0000	0.0	0.0000	0.0	1.7	1.00	0.67	0.1255	2.1084	0.000281	3.3068	5.56E-05	0.803187	0.100398
	01-23-2015 21	0	0	4.9	0.0000	0.0	0.0000	0.0	0.5	0.35	0.20	0.1255	0.619343	8.26E-05	3.3068	1.63E-05	0.235936	0.029492
	01-23-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-23-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-24-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	01-24-2015 17	0	0	6.7	0.0000	0.0	0.0000	0.0	0.7	0.70	0.27	0.1255	0.84336	0.000112	3.3068	2.22E-05	0.321275	0.040159
	01-24-2015 18	0	0	52.6	0.0133	0.7	0.0000	0.0	5.4	1.00	2.10	0.1255	6.6013	0.00088	3.3068	0.000174	2.514741	0.314343
	01-24-2015 19	0	0	65.2	0.0230	1.5	0.0000	0.0	6.7	1.00	2.60	0.1255	8.1826	0.001091	3.3068	0.000216	3.117131	0.389641
	01-24-2015 20	1	1	89.6	0.0246	2.2	0.0000	0.0	9.2	1.00	3.57	0.1255	11.2448	0.001499	3.3068	0.000296	4.283665	0.535458
	01-24-2015 21	0	0	126.9	0.0252	3.2	0.0000	0.0	13.0	1.00	5.06	0.1255	15.92595	0.002123	3.3068	0.00042	6.066932	0.758367
	01-24-2015 22	0	0	242.4	0.0520	12.6	0.0099	2.4	24.9	1.00	9.66	0.1255	30.4212	0.004056	3.3068	0.000802	11.58884	1.448606
	01-24-2015 23	0	0	224.1	0.0571	12.8	0.0406	9.1	23.0	1.00	8.93	0.1255	28.12455	0.00375	3.3068	0.000741	10.71394	1.339243
	01-25-2015 00	0	0	209.7	0.0582	12.2	0.0620	13.0	21.5	1.00	8.35	0.1255	26.31735	0.003509	3.3068	0.000693	10.0255	1.253187
	01-25-2015 01	0	0	193.9	0.0542	10.5	0.0624	12.1	19.9	1.00	7.73	0.1255	24.33445	0.003245	3.3068	0.000641	9.27012	1.158765
	01-25-2015 02	0	0	193.4	0.0548	10.6	0.0574	11.1	19.8	1.00	7.71	0.1255	24.2717	0.003236	3.3068	0.00064	9.246215	1.155777
	01-25-2015 03	0	0	192.2	0.0541	10.4	0.0546	10.5	19.7	1.00	7.66	0.1255	24.1211	0.003216	3.3068	0.000636	9.188845	1.148606
	01-25-2015 04	0	0	180.2	0.0488	8.8	0.0572	10.3	18.5	1.00	7.18	0.1255	22.6151	0.003015	3.3068	0.000596	8.615139	1.076892
	01-25-2015 05	0	0	226.8	0.0520	11.8	0.0573	13.0	23.3	1.00	9.04	0.1255	28.4634	0.003795	3.3068	0.00075	10.84303	1.355378
	01-25-2015 06	0	0	209.7	0.0510	10.7	0.0572	12.0	21.5	1.00	8.35	0.1255	26.31735	0.003509	3.3068	0.000693	10.0255	1.253187
	01-25-2015 07	0	0	226.5	0.0578	13.1	0.0508	11.5	23.2	1.00	9.02	0.1255	28.42575	0.00379	3.3068	0.000749	10.82869	1.353586
	01-25-2015 08	1	1	200.1	0.0550	11.0	0.1244	24.9	20.5	1.00	7.97	0.1255	25.11255	0.003348	3.3068	0.000662	9.566534	1.195817
	01-25-2015 09	0	0	206.5	0.0489	10.1	0.0823	17.0	21.2	1.00	8.23	0.1255	25.91575	0.003455	3.3068	0.000683	9.87251	1.234064
	01-25-2015 10	0	0	226.8	0.0529	12.0	0.0600	13.6	23.3	1.00	9.04	0.1255	28.4634	0.003795	3.3068	0.00075	10.84303	1.355378
	01-25-2015 11	0	24	419.0	0.1680	70.4	0.6585	275.9	43.0	1.00	16.69	0.1255	52.5845	0.007011	3.3068	0.001386	20.03187	2.503984
	01-25-2015 12	9	86	1009.5	0.3600	363.4	1.2229	1234.5	103.6	1.00	40.22	0.1255	126.6923	0.016892	3.3068	0.003338	48.26295	6.032869
	01-25-2015 13	71	106	1737.2	0.3840	667.1	1.5530	2697.9	178.2	1.00	69.21	0.1255	218.0186	0.029069	3.3068	0.005745	83.05339	10.38167
	01-25-2015 14	99	102	1952.2	0.4740	925.3	1.7288	3375.0	200.3	1.00	77.78	0.1255	245.0011	0.032666	3.3068	0.006455	93.33227	11.66653
	01-25-2015 15	100	98	1894.4	0.5310	1005.9	1.7223	3262.8	194.4	1.00	75.47	0.1255	237.7472	0.031699	3.3068	0.006264	90.56892	11.32112
	01-25-2015 16	98	98	1859.5	0.5210	968.8	1.7232	3204.3	190.8	1.00	74.08	0.1255	233.3673	0.031115	3.3068	0.006149	88.9004	11.11255
	01-25-2015 17	100	99	1881.2	0.5480	1030.9	1.7226	3240.5	193.0	1.00	74.95	0.1255	236.0906	0.031478	3.3068	0.006221	89.93785	11.24223
	01-25-2015 18	101	98	1887.9	0.5710	1078.0	1.7075	3223.5	193.7	1.00	75.22	0.1255	236.9315	0.03159	3.3068	0.006243	90.25817	11.28227
	01-25-2015 19	101	99	1862.3	0.5480	1020.5	1.7105	3185.5	191.1	1.00	74.20	0.1255	233.7187	0.031162	3.3068	0.006158	89.03426	11.12928
	01-25-2015 20	101	99	1887.3	0.4800	905.9	1.7224	3250.7	193.6	1.00	75.19	0.1255	236.8562	0.03158	3.3068	0.006241	90.22948	11.27869
	01-25-2015 21	99	99	1885.4	0.4480	844.7	1.7331	3267.5	193.4	1.00	75.12	0.1255	236.6177	0.031549	3.3068	0.006235	90.13865	11.26733
	01-25-2015 22	97	100	1878.7	0.3990	749.6	1.7253	3241.3	192.8	1.00	74.85	0.1255	235.7769	0.031436	3.3068	0.006212	89.81833	11.22729
	01-25-2015 23	97	100	1871.8	0.3310	619.6	1.7197	3219.0	192.0	1.00	74.57	0.1255	234.9109	0.031321	3.3068	0.00619	89.48845	11.18506
	01-26-2015 00	98	99	1872.0	0.3510	657.1	1.7461	3268.7	192.1	1.00	74.58	0.1255	234.936	0.031324	3.3068	0.00619	89.49801	11.18725
	01-26-2015 01	98	99	1880.5	0.3840	722.1	1.7554	3301.1	192.9	1.00	74.92	0.1255	236.0028	0.031467	3.3068	0.006218	89.90438	11.23805
	01-26-2015 02	97	99	1864.7	0.3770	703.0	1.7646	3290.4	191.3	1.00	74.29	0.1255	234.0199	0.031202	3.3068	0.006166	89.149	11.14363
	01-26-2015 03	100	102	1902.6	0.3840	730.6	1.7771	3381.2	195.2	1.00	75.80	0.1255	238.7763	0.031836	3.3068	0.006291	90.96096	11.37012
	01-26-2015 04	99	100	1877.0	0.3680	690.7	1.7869	3354.0	192.6	1.00	74.78	0.1255	235.5635	0.031408	3.3068	0.006207	89.73705	11.21713
	01-26-2015 05	99	105	1943.5	0.3810	740.5	1.7838	3466.8	199.4	1.00	77.43	0.1255	243.9093	0.032521	3.3068	0.006427	92.91633	11.61454
	01-26-2015 06	118	122	2262.8	0.3580	810.1	1.8242	4127.9	232.2	1.00	90.15	0.1255	283.9814	0.037864	3.3068	0.007483	108.1817	13.52271
	01-26-2015 07	125	149	2532.4	0.3900	987.6	1.8311	4637.0	259.8	1.00	100.89	0.1255	317.8162	0.042375	3.3068	0.008374	121.0709	15.13386
	01-26-2015 08	117	149	2475.5	0.3760	930.8	1.8400	4554.8	254.0	1.00	98.63	0.1255	310.6753	0.041423	3.3068	0.008186	118.3506	14.79382
	01-26-2015 09	136	148	2611.3	0.3660	955.7	1.8586	4853.4	267.9	1.00	104.04	0.1255	327.7182	0.043695	3.3068	0.008635	124.843	15.60538
	01-26-2015 10	130	165	2708.4	0.3700	1002.1	1.7778	4815.1	277.9	1.00	107.90	0.1255	339.9042	0.04532	3.3068	0.008956	129.4853	16.18566

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substation Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-26-2015 11	137	142	2592.3	0.4210	1091.4	1.8507	4797.5	266.0	1.00	103.28	0.1255	325.3337	0.043377	3.3068	0.008572	123.9347	15.49183
	01-26-2015 12	132	135	2474.7	0.3860	955.2	1.8729	4634.8	253.9	1.00	98.59	0.1255	310.5749	0.041409	3.3068	0.008183	118.3124	14.78904
	01-26-2015 13	130	128	2381.2	0.3750	893.0	1.8701	4453.1	244.3	1.00	94.87	0.1255	298.8406	0.039845	3.3068	0.007874	113.8422	14.23028
	01-26-2015 14	130	129	2398.2	0.3810	913.7	1.8723	4490.1	246.1	1.00	95.55	0.1255	300.9741	0.040129	3.3068	0.007793	114.655	14.33187
	01-26-2015 15	129	125	2351.4	0.3840	902.9	1.8716	4400.8	241.3	1.00	93.68	0.1255	295.1007	0.039346	3.3068	0.007776	112.4175	14.05219
	01-26-2015 16	130	126	2377.2	0.3770	896.2	1.8734	4453.5	243.9	1.00	94.71	0.1255	298.3386	0.039778	3.3068	0.007861	113.651	14.20637
	01-26-2015 17	137	129	2470.3	0.3790	936.2	1.8847	4655.7	253.5	1.00	98.42	0.1255	310.0227	0.041336	3.3068	0.008169	118.102	14.76275
	01-26-2015 18	142	138	2596.8	0.3900	1012.8	1.8862	4898.0	266.4	1.00	103.46	0.1255	325.8984	0.043452	3.3068	0.008587	124.1498	15.51873
	01-26-2015 19	150	151	2774.0	0.3780	1048.6	1.9065	5288.7	284.6	1.00	110.52	0.1255	348.137	0.046418	3.3068	0.009173	132.6215	16.57769
	01-26-2015 20	150	151	2789.0	0.3550	990.1	1.9111	5330.1	286.2	1.00	111.12	0.1255	350.0195	0.046669	3.3068	0.009223	133.3386	16.66733
	01-26-2015 21	149	151	2777.9	0.3500	972.3	1.9222	5339.7	285.0	1.00	110.67	0.1255	348.6265	0.046483	3.3068	0.009186	132.808	16.601
	01-26-2015 22	125	151	2552.4	0.3700	944.4	1.9328	4933.2	261.9	1.00	101.69	0.1255	320.3262	0.042709	3.3068	0.00844	122.0271	15.25339
	01-26-2015 23	111	148	2402.7	0.3430	824.1	1.9391	4659.1	246.5	1.00	95.73	0.1255	301.5389	0.040205	3.3068	0.007945	114.8701	14.5876
	01-27-2015 00	98	106	1913.2	0.3990	763.4	1.9218	3676.8	196.3	1.00	76.22	0.1255	240.1066	0.032014	3.3068	0.006327	91.46773	11.43347
	01-27-2015 01	97	104	1910.2	0.3940	752.6	1.9058	3640.5	196.0	1.00	76.10	0.1255	239.7301	0.031964	3.3068	0.006317	91.3243	11.41554
	01-27-2015 02	103	107	1990.7	0.3800	756.5	1.9158	3813.8	204.2	1.00	79.31	0.1255	249.8329	0.033311	3.3068	0.006583	95.17291	11.89661
	01-27-2015 03	99	104	1929.1	0.4080	787.1	1.9130	3690.3	197.9	1.00	76.86	0.1255	242.1021	0.032228	3.3068	0.006379	92.22789	11.52849
	01-27-2015 04	105	112	2069.4	0.3780	782.2	1.9196	3972.4	212.3	1.00	82.45	0.1255	259.7097	0.034627	3.3068	0.006843	98.93546	12.36693
	01-27-2015 05	100	105	1954.7	0.4190	819.0	1.9126	3738.6	200.6	1.00	77.88	0.1255	245.3149	0.032708	3.3068	0.006464	93.45179	11.68147
	01-27-2015 06	113	122	2205.3	0.3930	866.7	1.9312	4258.8	226.3	1.00	87.86	0.1255	276.7652	0.036901	3.3068	0.007292	105.4327	13.17908
	01-27-2015 07	131	147	2602.2	0.3790	986.2	1.9334	5031.0	267.0	1.00	103.67	0.1255	326.5761	0.043543	3.3068	0.008605	124.408	15.551
	01-27-2015 08	105	162	2472.3	0.4010	991.4	1.9545	4832.2	253.7	1.00	98.50	0.1255	310.2737	0.041369	3.3068	0.008175	118.1976	14.7747
	01-27-2015 09	117	164	2580.8	0.3760	970.4	1.9543	5043.6	264.8	1.00	102.82	0.1255	323.8904	0.043185	3.3068	0.008534	123.3849	15.42311
	01-27-2015 10	148	163	2857.0	0.3510	1002.8	1.9411	5545.6	293.1	1.00	113.82	0.1255	358.5535	0.047806	3.3068	0.009447	136.5896	17.07371
	01-27-2015 11	148	163	2857.9	0.3570	1020.3	1.9340	5527.1	293.2	1.00	113.86	0.1255	358.6665	0.047821	3.3068	0.00945	136.6327	17.07908
	01-27-2015 12	143	163	2795.4	0.3780	1056.7	1.9413	5426.7	286.8	1.00	111.37	0.1255	350.8227	0.046776	3.3068	0.009244	133.6446	16.70558
	01-27-2015 13	147	163	2844.3	0.3700	1052.4	1.9425	5525.0	291.8	1.00	113.32	0.1255	356.9597	0.047594	3.3068	0.009405	135.9825	16.99781
	01-27-2015 14	143	163	2784.4	0.3780	1052.5	1.9455	5417.0	285.7	1.00	110.93	0.1255	349.4422	0.046592	3.3068	0.009207	133.1187	16.63984
	01-27-2015 15	133	153	2641.3	0.3750	990.5	1.9315	5101.6	271.0	1.00	105.23	0.1255	331.4832	0.044197	3.3068	0.008734	126.2773	15.78466
	01-27-2015 16	139	147	2624.9	0.3650	958.1	1.9413	5095.7	269.3	1.00	104.58	0.1255	329.425	0.043923	3.3068	0.00868	125.4932	15.68665
	01-27-2015 17	149	152	2763.8	0.3620	1000.5	1.9322	5340.1	283.6	1.00	110.11	0.1255	346.8569	0.046247	3.3068	0.009139	132.1339	16.51673
	01-27-2015 18	153	154	2798.8	0.3690	1032.8	1.9407	5431.7	287.2	1.00	111.51	0.1255	351.2494	0.046833	3.3068	0.009255	133.8072	16.7259
	01-27-2015 19	169	157	2984.3	0.3700	1104.2	1.9280	5753.7	306.2	1.00	118.90	0.1255	374.5297	0.049936	3.3068	0.009868	142.6757	17.83446
	01-27-2015 20	169	158	2994.7	0.3590	1075.1	1.9281	5774.2	307.3	1.00	119.31	0.1255	375.8349	0.050111	3.3068	0.009903	143.1729	17.89661
	01-27-2015 21	169	158	3002.0	0.3590	1077.7	1.9243	5776.8	308.0	1.00	119.60	0.1255	376.751	0.050233	3.3068	0.009927	143.5219	17.94024
	01-27-2015 22	158	149	2802.1	0.3500	980.7	1.9280	5402.5	287.5	1.00	111.64	0.1255	351.6636	0.046888	3.3068	0.009266	133.9649	16.74562
	01-27-2015 23	139	140	2572.1	0.3510	902.8	1.9236	4947.7	263.9	1.00	102.47	0.1255	322.7986	0.043039	3.3068	0.008505	122.9689	15.37112
	01-28-2015 00	140	140	2595.0	0.3220	835.6	1.9314	5012.1	266.2	1.00	103.39	0.1255	325.6725	0.043422	3.3068	0.008581	124.0637	15.50797
	01-28-2015 01	137	147	2606.7	0.3550	925.4	1.9407	5058.7	267.4	1.00	103.85	0.1255	327.1409	0.043618	3.3068	0.00862	124.6231	15.57789
	01-28-2015 02	139	145	2637.9	0.3390	894.2	1.9401	5117.8	270.6	1.00	105.10	0.1255	331.0565	0.04414	3.3068	0.008723	126.1147	15.76434
	01-28-2015 03	139	145	2594.9	0.3520	913.4	1.9397	5033.4	266.2	1.00	103.38	0.1255	325.66	0.043421	3.3068	0.008581	124.059	15.50737
	01-28-2015 04	142	149	2679.8	0.3570	956.7	1.9367	5190.1	274.9	1.00	106.76	0.1255	336.3149	0.044841	3.3068	0.008861	128.1179	16.01474
	01-28-2015 05	150	153	2826.5	0.3660	1034.5	1.9141	5410.3	290.0	1.00	112.61	0.1255	354.7258	0.047296	3.3068	0.009347	135.1315	16.89143
	01-28-2015 06	167	157	2979.1	0.3510	1045.7	1.9268	5740.2	305.7	1.00	118.69	0.1255	373.8771	0.049849	3.3068	0.009851	142.4271	17.80339
	01-28-2015 07	170	158	2987.6	0.3560	1063.6	1.9392	5793.6	306.5	1.00	119.03	0.1255	374.9438	0.049992	3.3068	0.009879	142.8335	17.85418
	01-28-2015 08	168	158	2995.2	0.3620	1084.3	1.9348	5795.1	307.3	1.00	119.33	0.1255	375.8976	0.050119	3.3068	0.009904	143.1968	17.8996
	01-28-2015 09	155	158	2892.0	0.3440	994.8	1.9348	5595.4	296.7	1.00	115.22	0.1255	362.946	0.048392	3.3068	0.009563	138.2629	17.28287

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/Hr)	HCl (lb/hr)	HF (lb/hr)
	01-28-2015 10	132	154	2649.2	0.3900	1033.2	1.9357	5128.1	271.8	1.00	105.55	0.1255	332.4746	0.044329	3.3068	0.00876	126.655	15.83187
	01-28-2015 11	116	135	2333.8	0.3970	926.5	1.9372	4521.0	239.5	1.00	92.98	0.1255	292.8919	0.039052	3.3068	0.007717	111.5761	13.94701
	01-28-2015 12	106	138	2260.7	0.3590	811.6	1.9298	4362.6	231.9	1.00	90.07	0.1255	283.7179	0.037828	3.3068	0.007476	108.0813	13.51016
	01-28-2015 13	104	112	2030.3	0.3150	639.5	1.9245	3907.4	208.3	1.00	80.89	0.1255	254.8027	0.033973	3.3068	0.006714	97.06614	12.13327
	01-28-2015 14	103	101	1921.9	0.3310	636.1	1.9292	3707.7	197.2	1.00	76.57	0.1255	241.1985	0.032159	3.3068	0.006355	91.88367	11.48546
	01-28-2015 15	101	99	1883.1	0.3370	634.6	1.9313	3636.9	193.2	1.00	75.02	0.1255	236.3291	0.03151	3.3068	0.006227	90.02869	11.25359
	01-28-2015 16	106	111	2017.4	0.3410	687.9	1.9406	3915.0	207.0	1.00	80.37	0.1255	253.1837	0.033757	3.3068	0.006671	96.4494	12.05618
	01-28-2015 17	148	152	2783.4	0.3560	990.9	1.9649	5459.0	285.6	1.00	110.89	0.1255	349.3167	0.046575	3.3068	0.009204	133.0709	16.63386
	01-28-2015 18	154	153	2795.4	0.3430	958.8	1.9760	5523.6	286.8	1.00	111.37	0.1255	350.8227	0.046776	3.3068	0.009244	133.6446	16.70558
	01-28-2015 19	159	155	2898.5	0.3440	997.1	1.9635	5691.3	297.4	1.00	115.48	0.1255	363.7618	0.048501	3.3068	0.009585	138.5737	17.32171
	01-28-2015 20	162	155	2925.9	0.3600	1053.3	1.9685	5759.7	300.2	1.00	116.57	0.1255	367.2005	0.048959	3.3068	0.009675	139.8837	17.48546
	01-28-2015 21	163	154	2905.3	0.3520	1022.7	1.9873	5773.8	298.1	1.00	115.75	0.1255	364.6152	0.048615	3.3068	0.009607	138.8988	17.36235
	01-28-2015 22	161	148	2813.3	0.3480	979.0	1.9960	5615.4	288.6	1.00	112.08	0.1255	353.0692	0.047075	3.3068	0.009303	134.5004	16.81255
	01-28-2015 23	132	139	2495.4	0.3720	928.3	2.0044	5001.9	256.0	1.00	99.42	0.1255	313.1727	0.041756	3.3068	0.008252	119.302	14.91275
	01-29-2015 00	124	110	2171.8	0.3890	844.8	1.9991	4341.6	222.8	1.00	86.53	0.1255	272.5609	0.036341	3.3068	0.007182	103.8311	12.97888
	01-29-2015 01	106	99	1896.1	0.4070	771.7	1.9976	3787.7	194.5	1.00	75.54	0.1255	237.9606	0.031728	3.3068	0.00627	90.6502	11.33127
	01-29-2015 02	98	99	1886.9	0.3850	726.5	1.9810	3737.9	193.6	1.00	75.18	0.1255	236.806	0.031574	3.3068	0.00624	90.21036	11.27629
	01-29-2015 03	103	105	1933.1	0.3820	738.4	1.9980	3862.4	198.3	1.00	77.02	0.1255	242.6041	0.032347	3.3068	0.006392	92.41912	11.55239
	01-29-2015 04	133	146	2528.0	0.3840	970.8	2.0139	5091.2	259.4	1.00	100.72	0.1255	317.264	0.042301	3.3068	0.00836	120.8606	15.10757
	01-29-2015 05	141	150	2619.5	0.3560	932.5	2.0134	5274.1	268.8	1.00	104.36	0.1255	328.7473	0.043832	3.3068	0.008662	125.2351	15.65438
	01-29-2015 06	159	150	2765.8	0.3420	945.9	2.0105	5560.6	283.8	1.00	110.19	0.1255	347.1079	0.046428	3.3068	0.009146	132.2295	16.52869
	01-29-2015 07	162	153	2837.1	0.3500	993.0	2.0071	5694.4	291.1	1.00	113.03	0.1255	356.0561	0.047473	3.3068	0.009382	135.6382	16.95478
	01-29-2015 08	167	157	2893.7	0.3600	1041.7	2.0137	5827.1	296.9	1.00	115.29	0.1255	363.1594	0.04842	3.3068	0.009569	138.3442	17.29303
	01-29-2015 09	146	149	2617.7	0.3350	876.9	2.0261	5303.7	268.6	1.00	104.29	0.1255	328.5214	0.043802	3.3068	0.008656	125.149	15.64363
	01-29-2015 10	127	146	2447.1	0.3650	893.2	2.0237	4952.3	251.1	1.00	97.49	0.1255	307.1111	0.040947	3.3068	0.008092	116.9928	14.6241
	01-29-2015 11	113	152	2396.2	0.3200	766.8	2.0115	4819.9	245.8	1.00	95.47	0.1255	300.7231	0.040096	3.3068	0.007924	114.5594	14.31992
	01-29-2015 12	108	115	2029.3	0.3240	657.5	2.0083	4075.5	208.2	1.00	80.85	0.1255	254.6772	0.033956	3.3068	0.00671	97.01833	12.12729
	01-29-2015 13	104	112	1967.7	0.3310	651.3	2.0164	3967.7	201.9	1.00	78.39	0.1255	246.9464	0.032926	3.3068	0.006507	94.07331	11.75916
	01-29-2015 14	99	110	1910.8	0.3440	657.3	2.0178	3855.7	196.0	1.00	76.13	0.1255	239.8054	0.031974	3.3068	0.006319	91.35299	11.41912
	01-29-2015 15	99	102	1873.8	0.3380	633.3	2.0010	3749.5	192.3	1.00	74.65	0.1255	235.1619	0.031354	3.3068	0.006196	89.58406	11.19801
	01-29-2015 16	102	127	2115.9	0.3260	689.8	2.0173	4268.5	217.1	1.00	84.30	0.1255	265.5455	0.035405	3.3068	0.006997	101.1586	12.64482
	01-29-2015 17	130	150	2562.4	0.3700	948.1	2.0318	5206.4	262.9	1.00	102.09	0.1255	321.5812	0.042877	3.3068	0.008473	122.5052	15.31315
	01-29-2015 18	149	153	2718.1	0.3690	1003.0	2.0146	5476.0	278.9	1.00	108.29	0.1255	341.1216	0.045482	3.3068	0.008988	129.949	16.24363
	01-29-2015 19	130	151	2559.6	0.3900	998.2	2.0167	5162.0	262.6	1.00	101.98	0.1255	321.2298	0.04283	3.3068	0.008464	122.3713	15.29641
	01-29-2015 20	122	144	2408.6	0.3840	924.9	2.0229	4872.3	247.1	1.00	95.96	0.1255	302.2793	0.040303	3.3068	0.007965	115.1522	14.39402
	01-29-2015 21	100	143	2229.3	0.3460	771.3	2.0083	4477.1	228.7	1.00	88.82	0.1255	279.7772	0.037303	3.3068	0.007372	106.5801	13.32251
	01-29-2015 22	98	125	2059.7	0.3390	698.2	2.0126	4145.4	211.3	1.00	82.06	0.1255	258.4924	0.034465	3.3068	0.006811	98.47171	12.30896
	01-29-2015 23	98	106	1901.2	0.3750	713.0	2.0185	3837.6	195.1	1.00	75.75	0.1255	238.6006	0.031813	3.3068	0.006287	90.89402	11.36175
	01-30-2015 00	100	113	1979.1	0.3870	765.9	2.0013	3960.7	203.1	1.00	78.85	0.1255	248.3771	0.033116	3.3068	0.006544	94.61833	11.82729
	01-30-2015 01	98	100	1870.8	0.4100	767.0	1.9986	3739.0	191.9	1.00	74.53	0.1255	234.7854	0.031304	3.3068	0.006186	89.44064	11.18008
	01-30-2015 02	98	100	1863.9	0.4000	745.6	1.9970	3722.2	191.2	1.00	74.26	0.1255	233.9195	0.031189	3.3068	0.006163	89.11076	11.13884
	01-30-2015 03	98	100	1875.1	0.3980	745.3	1.9919	3735.1	192.4	1.00	74.71	0.1255	235.3251	0.031376	3.3068	0.006201	89.64622	11.20578
	01-30-2015 04	98	100	1877.5	0.4040	758.5	1.9930	3741.8	192.6	1.00	74.80	0.1255	235.6263	0.031416	3.3068	0.006208	89.76096	11.22012
	01-30-2015 05	111	130	2291.6	0.3790	868.5	1.9972	4576.8	235.1	1.00	91.30	0.1255	287.5958	0.038345	3.3068	0.007578	109.5586	13.69482
	01-30-2015 06	152	160	2880.1	0.3960	1140.5	2.0169	5808.9	295.5	1.00	114.75	0.1255	361.4526	0.048193	3.3068	0.009524	137.694	17.21175
	01-30-2015 07	169	158	2960.7	0.4120	1219.8	2.0374	6032.0	303.8	1.00	117.96	0.1255	371.5679	0.049542	3.3068	0.00979	141.5474	17.69343
	01-30-2015 08	155	157	2850.8	0.3690	1051.9	2.0247	5772.0	292.5	1.00	113.58	0.1255	357.7754	0.047703	3.3068	0.009427	136.2932	17.03665

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-30-2015 09	153	158	2819.9	0.3550	1001.1	2.0465	5771.0	289.3	1.00	112.35	0.1255	353.8975	0.047186	3.3068	0.009325	134.8159	16.85199
	01-30-2015 10	165	153	2881.6	0.3650	1051.8	2.0366	5868.7	295.7	1.00	114.80	0.1255	361.6408	0.048218	3.3068	0.009529	137.7657	17.22072
	01-30-2015 11	150	151	2715.6	0.3460	939.6	2.0333	5521.7	278.6	1.00	108.19	0.1255	340.8078	0.04544	3.3068	0.00898	129.8295	16.22869
	01-30-2015 12	146	152	2672.6	0.3620	967.5	2.0533	5487.6	274.2	1.00	106.48	0.1255	335.4113	0.044721	3.3068	0.008838	127.7737	15.97171
	01-30-2015 13	149	151	2704.2	0.3630	981.6	2.0500	5543.6	277.5	1.00	107.74	0.1255	339.3771	0.04525	3.3068	0.008942	129.2845	16.16056
	01-30-2015 14	135	149	2619.6	0.3810	998.1	2.0413	5347.4	268.8	1.00	104.37	0.1255	328.7598	0.043834	3.3068	0.008662	125.2398	15.65498
	01-30-2015 15	124	140	2428.2	0.3880	942.1	2.0500	4977.8	249.1	1.00	96.74	0.1255	304.7391	0.040631	3.3068	0.00803	116.0892	14.51116
	01-30-2015 16	139	156	2726.5	0.3790	1033.3	2.0500	5589.2	279.7	1.00	108.63	0.1255	342.1758	0.045623	3.3068	0.009016	130.3506	16.29382
	01-30-2015 17	159	158	2885.2	0.3800	1096.4	2.0587	5939.9	296.0	1.00	114.95	0.1255	362.0926	0.048278	3.3068	0.009541	137.9378	17.24223
	01-30-2015 18	167	165	3006.9	0.3580	1076.5	2.0573	6186.0	308.5	1.00	119.80	0.1255	377.366	0.050315	3.3068	0.009943	143.7562	17.96952
	01-30-2015 19	165	161	2958.0	0.3540	1047.1	2.0555	6080.1	303.5	1.00	117.85	0.1255	371.229	0.049496	3.3068	0.009781	141.4183	17.67729
	01-30-2015 20	151	161	2835.2	0.3450	978.1	2.0493	5810.3	290.9	1.00	112.96	0.1255	355.8176	0.047442	3.3068	0.009375	135.5474	16.94343
	01-30-2015 21	164	156	2903.1	0.3440	998.7	2.0473	5943.4	297.9	1.00	115.66	0.1255	364.3391	0.048578	3.3068	0.0096	138.7936	17.3492
	01-30-2015 22	161	152	2813.9	0.3510	987.7	2.0593	5794.8	288.7	1.00	112.11	0.1255	353.1445	0.047085	3.3068	0.009305	134.5291	16.81614
	01-30-2015 23	149	151	2715.1	0.3610	980.2	2.0508	5568.2	278.6	1.00	108.17	0.1255	340.7451	0.045432	3.3068	0.008978	129.8056	16.2257
	01-31-2015 00	147	146	2666.3	0.3780	1007.9	2.0410	5441.9	273.6	1.00	106.23	0.1255	334.6207	0.044615	3.3068	0.008817	127.4725	15.93406
	01-31-2015 01	158	161	2916.4	0.3750	1093.7	2.0462	5967.6	299.2	1.00	116.19	0.1255	366.0082	0.0488	3.3068	0.009644	139.4295	17.24269
	01-31-2015 02	153	154	2776.1	0.3680	1021.6	2.0502	5691.6	284.8	1.00	110.60	0.1255	348.4006	0.046453	3.3068	0.00918	132.7219	16.59024
	01-31-2015 03	159	163	2933.8	0.3800	1114.8	2.0527	6022.3	301.0	1.00	116.88	0.1255	368.1919	0.049091	3.3068	0.009701	140.2614	17.53267
	01-31-2015 04	162	165	2962.8	0.3810	1128.8	2.0523	6110.3	304.0	1.00	118.04	0.1255	371.8314	0.049577	3.3068	0.009797	141.6478	17.70598
	01-31-2015 05	162	165	2995.8	0.3720	1114.4	2.0386	6107.3	307.4	1.00	119.35	0.1255	375.9729	0.050129	3.3068	0.009906	143.2255	17.90319
	01-31-2015 06	162	165	3055.7	0.3750	1145.9	2.0623	6301.7	313.5	1.00	121.74	0.1255	383.4904	0.051131	3.3068	0.010105	146.0892	18.26116
	01-31-2015 07	170	171	3069.6	0.4120	1264.7	2.0763	6373.5	314.9	1.00	122.29	0.1255	385.2348	0.051364	3.3068	0.01015	146.7538	18.34422
	01-31-2015 08	170	175	3098.4	0.4190	1298.2	2.0700	6413.6	317.9	1.00	123.44	0.1255	388.8492	0.051846	3.3068	0.010246	148.1307	18.51633
	01-31-2015 09	170	176	3135.9	0.4200	1317.1	2.0578	6453.0	321.7	1.00	124.94	0.1255	393.5555	0.052473	3.3068	0.01037	149.9235	18.74044
	01-31-2015 10	165	175	3073.8	0.4160	1278.7	2.0744	6376.2	315.4	1.00	122.46	0.1255	385.7619	0.051434	3.3068	0.010164	146.9546	18.36932
	01-31-2015 11	154	173	2959.6	0.4040	1195.7	2.0744	6139.4	303.7	1.00	117.91	0.1255	371.4298	0.049523	3.3068	0.009787	141.4948	17.68685
	01-31-2015 12	127	144	2487.0	0.4200	1044.5	2.0620	5128.2	255.2	1.00	99.08	0.1255	312.1185	0.041615	3.3068	0.008224	118.9004	14.86255
	01-31-2015 13	111	117	2099.3	0.4170	875.4	2.0476	4298.5	215.4	1.00	83.64	0.1255	263.4622	0.035128	3.3068	0.006942	100.3649	12.54562
	01-31-2015 14	98	100	1853.3	0.4080	756.1	2.0335	3768.6	190.1	1.00	73.84	0.1255	232.5892	0.031011	3.3068	0.006128	88.60398	11.0755
	01-31-2015 15	98	100	1850.3	0.3830	708.7	2.0482	3789.8	189.8	1.00	73.72	0.1255	232.2127	0.030961	3.3068	0.006119	88.46056	11.05757
	01-31-2015 16	99	101	1882.2	0.3820	719.0	2.0499	3858.4	193.1	1.00	74.99	0.1255	236.2161	0.031495	3.3068	0.006224	89.98566	11.24821
	01-31-2015 17	107	113	2023.5	0.3600	728.5	2.0686	4185.8	207.6	1.00	80.62	0.1255	253.9493	0.033859	3.3068	0.006691	96.74104	12.09263
	01-31-2015 18	144	159	2756.3	0.3630	1000.5	2.0662	5695.2	282.8	1.00	109.81	0.1255	345.9157	0.046121	3.3068	0.009114	131.7753	16.47191
	01-31-2015 19	159	166	2940.1	0.3860	1134.9	2.0529	6035.6	301.6	1.00	117.14	0.1255	368.9826	0.049197	3.3068	0.009722	140.5625	17.57032
	01-31-2015 20	159	170	3001.1	0.3840	1152.4	2.0319	6097.8	307.9	1.00	119.57	0.1255	376.6381	0.050218	3.3068	0.009924	143.4789	17.93486
	01-31-2015 21	146	153	2708.2	0.3870	1048.1	2.0217	5475.1	277.9	1.00	107.90	0.1255	339.8791	0.045316	3.3068	0.008955	129.4757	16.18446
	01-31-2015 22	121	128	2283.1	0.4080	931.5	2.0236	4620.1	234.2	1.00	90.96	0.1255	286.5291	0.038203	3.3068	0.00755	109.1522	13.64402
	01-31-2015 23	99	101	1832.5	0.4360	799.0	2.0258	3712.3	188.0	1.00	73.01	0.1255	229.9788	0.030663	3.3068	0.00606	87.60956	10.9512
	02-01-2015 00	98	119	2019.0	0.3790	765.2	2.0233	4085.1	207.1	1.00	80.44	0.1255	253.3845	0.033784	3.3068	0.006676	96.5259	12.06574
	02-01-2015 01	99	130	2115.6	0.3790	801.8	2.0284	4291.2	217.1	1.00	84.29	0.1255	265.5078	0.0354	3.3068	0.006996	101.1442	12.64303
	02-01-2015 02	97	105	1873.0	0.3810	713.6	2.0172	3778.2	192.2	1.00	74.62	0.1255	235.0615	0.031341	3.3068	0.006194	89.54582	11.19323
	02-01-2015 03	93	100	1792.1	0.3600	645.2	2.0121	3605.8	183.9	1.00	71.40	0.1255	224.9086	0.029987	3.3068	0.005926	85.67809	10.70976
	02-01-2015 04	93	100	1801.6	0.3510	632.4	2.0074	3616.5	184.8	1.00	71.78	0.1255	226.1008	0.030146	3.3068	0.005957	86.13227	10.76653
	02-01-2015 05	93	106	1828.8	0.3620	662.0	1.9932	3645.2	187.6	1.00	72.86	0.1255	229.5144	0.030601	3.3068	0.006047	87.43267	10.92908
	02-01-2015 06	99	105	1918.3	0.3500	671.4	1.9829	3803.8	196.8	1.00	76.43	0.1255	240.7467	0.032099	3.3068	0.006343	91.71155	11.46394
	02-01-2015 07	104	109	1992.8	0.3440	685.5	1.9901	3965.8	204.5	1.00	79.39	0.1255	250.0964	0.033346	3.3068	0.00659	95.27331	11.90916

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-01-2015 08	138	156	2712.0	0.3620	981.7	2.0032	5432.6	278.3	1.00	108.05	0.1255	340.356	0.04538	3.3068	0.008968	129.6574	16.20717
	02-01-2015 09	155	161	2868.9	0.3700	1061.5	2.0058	5754.5	294.3	1.00	114.30	0.1255	360.047	0.048005	3.3068	0.009487	137.1586	17.14482
	02-01-2015 10	164	172	3033.1	0.3660	1110.1	2.0102	6097.2	311.2	1.00	120.84	0.1255	380.6541	0.050753	3.3068	0.01003	145.0088	18.1261
	02-01-2015 11	132	135	2389.0	0.3880	926.9	2.0113	4805.0	245.1	1.00	95.18	0.1255	299.8195	0.039975	3.3068	0.0079	114.2151	14.27689
	02-01-2015 12	100	103	1869.1	0.3800	710.3	1.9822	3705.0	191.8	1.00	74.47	0.1255	234.5721	0.031276	3.3068	0.006181	89.35936	11.16992
	02-01-2015 13	107	115	2030.2	0.3490	708.5	1.9821	4024.1	208.3	1.00	80.88	0.1255	254.7901	0.033971	3.3068	0.006713	97.06135	12.13267
	02-01-2015 14	124	137	2387.1	0.3540	845.0	1.9925	4756.3	244.9	1.00	95.10	0.1255	299.5811	0.039944	3.3068	0.007894	114.1243	14.26554
	02-01-2015 15	127	141	2411.8	0.4020	969.5	2.0113	4850.8	247.4	1.00	96.09	0.1255	302.6809	0.040357	3.3068	0.007975	115.3052	14.41315
	02-01-2015 16	128	142	2464.0	0.3960	975.7	1.9945	4914.5	252.8	1.00	98.17	0.1255	309.232	0.04123	3.3068	0.008148	117.8008	14.7251
	02-01-2015 17	142	156	2699.1	0.3800	1025.7	2.0089	5422.2	276.9	1.00	107.53	0.1255	338.7371	0.045164	3.3068	0.008925	129.0406	16.13008
	02-01-2015 18	159	160	2848.2	0.3850	1096.6	2.0155	5740.6	292.2	1.00	113.47	0.1255	357.4491	0.047659	3.3068	0.009418	136.1689	17.02112
	02-01-2015 19	112	119	2072.6	0.4230	876.7	1.9938	4132.3	212.6	1.00	82.57	0.1255	260.1113	0.034681	3.3068	0.006854	99.08845	12.38606
	02-01-2015 20	101	103	1865.4	0.3630	677.1	1.9847	3702.2	191.4	1.00	74.32	0.1255	234.1077	0.031214	3.3068	0.006168	89.18247	11.14781
	02-01-2015 21	125	141	2416.0	0.3610	872.2	1.9999	4831.7	247.9	1.00	96.25	0.1255	303.208	0.040427	3.3068	0.007989	115.506	14.43825
	02-01-2015 22	126	135	2371.4	0.3950	936.7	1.9789	4692.7	243.3	1.00	94.48	0.1255	297.6107	0.039681	3.3068	0.007842	113.3737	14.17171
	02-01-2015 23	125	111	2129.7	0.4000	851.9	1.9686	4192.5	218.5	1.00	84.85	0.1255	267.2774	0.035636	3.3068	0.007042	101.8183	12.72729
	02-02-2015 00	98	107	1888.7	0.3700	698.8	1.9438	3671.3	193.8	1.00	75.25	0.1255	237.0319	0.031604	3.3068	0.006248	90.29641	12.28705
	02-02-2015 01	98	103	1856.9	0.3460	642.5	1.9354	3593.9	190.5	1.00	73.98	0.1255	233.041	0.031072	3.3068	0.00614	88.7761	11.09701
	02-02-2015 02	98	100	1833.1	0.3400	623.3	1.9313	3540.2	188.1	1.00	73.03	0.1255	230.0541	0.030673	3.3068	0.006062	87.63825	10.95478
	02-02-2015 03	98	100	1816.8	0.3480	632.2	1.9441	3532.1	185.4	1.00	72.38	0.1255	228.0084	0.030401	3.3068	0.006008	86.85896	10.85737
	02-02-2015 04	98	100	1817.7	0.3460	628.9	1.9448	3535.1	186.5	1.00	72.42	0.1255	228.1214	0.030416	3.3068	0.006011	86.90199	10.86275
	02-02-2015 05	98	100	1816.0	0.3240	588.4	1.9357	3515.3	186.3	1.00	72.35	0.1255	227.908	0.030387	3.3068	0.006005	86.82072	10.85259
	02-02-2015 06	114	122	2195.5	0.3440	755.3	1.9516	4284.8	225.3	1.00	87.47	0.1255	275.5353	0.036737	3.3068	0.00726	104.9641	13.12052
	02-02-2015 07	123	131	2324.5	0.3890	904.2	1.9686	4576.1	238.5	1.00	92.61	0.1255	291.7248	0.038896	3.3068	0.007687	111.1315	13.89143
	02-02-2015 08	122	128	2291.1	0.3860	884.4	1.9696	4512.6	235.1	1.00	91.28	0.1255	287.5331	0.038337	3.3068	0.007576	109.5347	13.69183
	02-02-2015 09	128	134	2398.5	0.3700	887.4	1.9651	4713.2	246.1	1.00	95.56	0.1255	301.0118	0.040134	3.3068	0.007931	114.6693	14.33367
	02-02-2015 10	132	145	2518.6	0.3650	919.3	1.9685	4957.8	258.4	1.00	100.34	0.1255	316.0843	0.042144	3.3068	0.008328	120.4112	15.05139
	02-02-2015 11	133	148	2534.6	0.3610	915.0	1.9829	5025.9	260.0	1.00	100.98	0.1255	318.0923	0.042412	3.3068	0.008381	121.1761	15.14701
	02-02-2015 12	145	153	2680.9	0.3440	922.2	1.9890	5332.2	275.1	1.00	106.81	0.1255	336.453	0.04486	3.3068	0.008865	128.1705	16.02131
	02-02-2015 13	158	165	2908.9	0.3520	1023.9	1.9940	5800.4	298.5	1.00	115.89	0.1255	365.067	0.048675	3.3068	0.009619	139.0709	17.38386
	02-02-2015 14	167	174	3086.8	0.3630	1120.5	1.9822	6118.7	316.7	1.00	122.98	0.1255	387.3934	0.051652	3.3068	0.010207	147.5761	18.44701
	02-02-2015 15	145	148	2636.3	0.3580	943.8	1.9757	5208.5	270.5	1.00	105.03	0.1255	330.8557	0.044113	3.3068	0.008718	126.0382	15.75478
	02-02-2015 16	138	150	2608.0	0.3570	931.1	1.9882	5185.3	267.6	1.00	103.90	0.1255	327.304	0.04364	3.3068	0.008624	124.6853	15.58566
	02-02-2015 17	160	167	2935.0	0.3370	989.1	1.9970	5861.2	301.1	1.00	116.93	0.1255	368.3425	0.049112	3.3068	0.009705	140.3187	17.53984
	02-02-2015 18	166	173	3051.0	0.3440	1049.5	2.0028	6110.6	313.0	1.00	121.55	0.1255	382.9005	0.051053	3.3068	0.010089	145.8645	18.23307
	02-02-2015 19	171	176	3108.3	0.3560	1106.6	2.0112	6251.5	318.9	1.00	123.84	0.1255	390.0917	0.052011	3.3068	0.010278	148.604	18.57555
	02-02-2015 20	172	175	3117.0	0.3590	1119.0	2.0077	6258.1	319.8	1.00	124.18	0.1255	391.1835	0.052157	3.3068	0.010307	149.0199	18.62749
	02-02-2015 21	172	175	3109.2	0.3550	1103.8	2.0170	6271.3	319.0	1.00	123.87	0.1255	390.2046	0.052026	3.3068	0.010281	148.647	18.58088
	02-02-2015 22	161	163	2874.1	0.3590	1031.8	2.0182	5800.6	294.9	1.00	114.51	0.1255	360.6996	0.048093	3.3068	0.009504	137.4072	17.1759
	02-02-2015 23	136	133	2422.3	0.3880	939.9	1.9982	4840.3	248.5	1.00	96.51	0.1255	303.9987	0.040533	3.3068	0.00801	115.8072	14.4759
	02-03-2015 00	115	137	2299.2	0.3980	915.1	1.9941	4584.8	235.9	1.00	91.60	0.1255	288.5496	0.038473	3.3068	0.007603	109.9219	13.74024
	02-03-2015 01	111	114	2052.1	0.4000	820.8	1.9942	4092.2	210.5	1.00	81.76	0.1255	257.5386	0.034338	3.3068	0.006786	98.10837	12.26355
	02-03-2015 02	104	104	1919.5	0.4130	792.8	1.9892	3818.3	196.9	1.00	76.47	0.1255	240.8973	0.032119	3.3068	0.006347	91.76892	11.47112
	02-03-2015 03	119	120	2195.2	0.3780	829.8	1.9972	4384.3	225.2	1.00	87.46	0.1255	275.4976	0.036732	3.3068	0.007259	104.9498	13.11873
	02-03-2015 04	125	125	2266.8	0.3760	852.3	2.0107	4557.9	232.6	1.00	90.31	0.1255	284.4834	0.037931	3.3068	0.007496	108.3729	13.54661
	02-03-2015 05	139	142	2589.8	0.3480	901.3	1.9920	5158.9	265.7	1.00	103.18	0.1255	325.0199	0.043335	3.3068	0.008564	123.8151	15.47689
	02-03-2015 06	162	165	2960.8	0.3560	1054.0	2.0117	5956.3	303.8	1.00	117.96	0.1255	371.5804	0.049543	3.3068	0.009791	141.5522	17.69402

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx (lb/mmBtu)	Common Stack NOx (lb/Hr)	Common Stack SO2 (lb/mmBtu)	Common Stack SO2 (lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal (tons/hr)	PM-10 (lb/mmBtu)	PM-10 (lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-03-2015 07	171	176	3081.6	0.3560	1097.0	2.0251	6240.4	316.2	1.00	122.77	0.1255	386.7408	0.051565	3.3068	0.01019	147.3275	18.41594
	02-03-2015 08	171	176	3106.8	0.3530	1096.7	2.0108	6247.0	318.8	1.00	123.78	0.1255	389.9034	0.051986	3.3068	0.010273	148.5323	18.56653
	02-03-2015 09	167	172	3016.0	0.3520	1061.6	2.0191	6089.7	309.4	1.00	120.16	0.1255	378.508	0.050467	3.3068	0.009973	144.1912	18.0239
	02-03-2015 10	150	158	2715.6	0.3400	923.3	1.9947	5416.9	278.6	1.00	108.19	0.1255	340.8078	0.04544	3.3068	0.00898	129.8295	16.22869
	02-03-2015 11	145	152	2631.5	0.3810	1002.6	1.9686	5180.4	270.0	1.00	104.84	0.1255	330.2533	0.044033	3.3068	0.008702	125.8088	15.7261
	02-03-2015 12	124	135	2289.2	0.3920	897.4	1.9619	4491.1	234.9	1.00	91.20	0.1255	287.2946	0.038305	3.3068	0.00757	109.4438	13.68048
	02-03-2015 13	123	131	2285.7	0.3800	868.6	1.9434	4442.1	234.5	1.00	91.06	0.1255	286.8554	0.038247	3.3068	0.007558	109.2765	13.65956
	02-03-2015 14	108	112	1961.2	0.3960	776.6	1.9333	3791.6	201.2	1.00	78.14	0.1255	246.1306	0.032817	3.3068	0.006485	93.76255	11.72032
	02-03-2015 15	98	101	1782.0	0.4000	712.8	1.9512	3477.1	182.8	1.00	71.00	0.1255	223.641	0.029818	3.3068	0.005893	85.19522	10.6494
	02-03-2015 16	115	121	2106.3	0.3640	766.7	1.9520	4111.6	216.1	1.00	83.92	0.1255	264.3407	0.035245	3.3068	0.006965	100.6996	12.58745
	02-03-2015 17	136	149	2510.1	0.3680	923.7	1.9683	4940.7	257.5	1.00	100.00	0.1255	315.0176	0.042002	3.3068	0.0083	120.0048	15.0006
	02-03-2015 18	169	176	3005.1	0.3530	1060.8	1.9742	5932.7	308.3	1.00	119.73	0.1255	377.1401	0.050285	3.3068	0.009937	143.6701	17.95876
	02-03-2015 19	170	176	2996.2	0.3510	1051.7	1.9841	5944.9	307.4	1.00	119.37	0.1255	376.0231	0.050136	3.3068	0.009908	143.2446	17.90558
	02-03-2015 20	170	176	3007.1	0.3430	1031.4	1.9798	5953.5	308.5	1.00	119.80	0.1255	377.3911	0.050318	3.3068	0.009944	143.7657	17.97072
	02-03-2015 21	170	176	3029.2	0.3550	1075.4	1.9824	6005.0	310.8	1.00	120.69	0.1255	380.1646	0.050688	3.3068	0.010017	144.8223	18.10279
	02-03-2015 22	151	153	2630.4	0.3760	989.0	1.9800	5208.1	269.9	1.00	104.80	0.1255	330.1152	0.044015	3.3068	0.008698	125.7562	15.71952
	02-03-2015 23	109	106	1924.0	0.3900	750.4	1.9391	3730.9	197.4	1.00	76.65	0.1255	241.462	0.032194	3.3068	0.005862	91.98406	11.49801
	02-04-2015 00	98	106	1832.4	0.3520	645.0	1.9385	3552.1	188.0	1.00	73.00	0.1255	229.9662	0.030662	3.3068	0.006059	87.60478	10.9506
	02-04-2015 01	98	105	1831.7	0.3500	641.1	1.9456	3563.7	187.9	1.00	72.98	0.1255	229.8784	0.03065	3.3068	0.006057	87.57131	10.94641
	02-04-2015 02	98	99	1791.8	0.3510	628.9	1.9384	3473.3	183.8	1.00	71.39	0.1255	224.8709	0.029982	3.3068	0.005925	85.66375	10.70797
	02-04-2015 03	98	99	1777.9	0.3550	631.2	1.9449	3457.9	182.4	1.00	70.83	0.1255	223.1265	0.02975	3.3068	0.005879	84.9992	10.6249
	02-04-2015 04	98	99	1797.7	0.3460	622.0	1.9239	3458.6	184.4	1.00	71.62	0.1255	225.6114	0.030081	3.3068	0.005945	85.94582	10.74323
	02-04-2015 05	118	122	2185.7	0.3730	815.3	1.9365	4232.6	224.3	1.00	87.08	0.1255	274.3054	0.036573	3.3068	0.007228	104.4956	13.06195
	02-04-2015 06	158	161	2848.2	0.3820	1088.0	1.9588	5579.1	292.2	1.00	113.47	0.1255	357.4491	0.047659	3.3068	0.009418	136.1689	17.02112
	02-04-2015 07	167	171	2954.6	0.3840	1134.6	1.9519	5767.2	303.1	1.00	117.71	0.1255	370.8023	0.04944	3.3068	0.00977	141.2558	17.65697
	02-04-2015 08	158	164	2801.2	0.3600	1008.4	1.9410	5437.0	287.4	1.00	111.60	0.1255	351.5506	0.046873	3.3068	0.009263	133.9219	16.74024
	02-04-2015 09	130	139	2368.8	0.3820	904.9	1.9299	4571.6	243.0	1.00	94.37	0.1255	297.2844	0.039637	3.3068	0.007833	113.2494	14.15618
	02-04-2015 10	109	112	1991.0	0.4110	818.3	1.9137	3810.1	204.3	1.00	79.32	0.1255	249.8705	0.033316	3.3068	0.006584	95.18725	11.89841
	02-04-2015 11	99	100	1810.5	0.4180	756.8	1.8965	3433.7	185.8	1.00	72.13	0.1255	227.2178	0.030295	3.3068	0.005987	86.55777	10.81972
	02-04-2015 12	99	100	1817.8	0.4040	734.4	1.8942	3443.2	186.5	1.00	72.42	0.1255	228.1339	0.030417	3.3068	0.006011	86.90677	10.86335
	02-04-2015 13	100	100	1822.4	0.4020	732.6	1.8935	3450.7	187.0	1.00	72.61	0.1255	228.7112	0.030494	3.3068	0.006026	87.12669	10.89084
	02-04-2015 14	99	100	1808.9	0.4050	732.6	1.9111	3456.9	185.6	1.00	72.07	0.1255	227.017	0.030268	3.3068	0.005982	86.48127	10.81016
	02-04-2015 15	99	100	1812.7	0.4060	736.0	1.9018	3447.4	186.0	1.00	72.22	0.1255	227.4939	0.030332	3.3068	0.005994	86.66295	10.83287
	02-04-2015 16	99	100	1794.6	0.4100	735.8	1.9080	3424.1	184.1	1.00	71.50	0.1255	225.2223	0.030029	3.3068	0.005934	85.79761	10.7247
	02-04-2015 17	105	109	1930.7	0.3870	747.2	1.9052	3678.4	198.1	1.00	76.92	0.1255	242.3029	0.032307	3.3068	0.006384	92.30438	11.53805
	02-04-2015 18	125	135	2323.0	0.3680	854.9	1.9032	4421.2	238.3	1.00	92.55	0.1255	291.5365	0.038871	3.3068	0.007682	111.0598	13.88247
	02-04-2015 19	125	134	2303.4	0.3740	861.5	1.9023	4381.7	236.3	1.00	91.77	0.1255	289.0767	0.038543	3.3068	0.007617	110.1227	13.76534
	02-04-2015 20	123	131	2257.9	0.3730	842.2	1.9064	4304.4	231.7	1.00	89.96	0.1255	283.3665	0.037782	3.3068	0.007466	107.9474	13.49343
	02-04-2015 21	116	122	2110.5	0.3790	799.9	1.9114	4034.0	216.5	1.00	84.08	0.1255	264.8678	0.035315	3.3068	0.006979	100.9004	12.61255
	02-04-2015 22	103	107	1882.7	0.3420	643.9	1.8939	3565.7	193.2	1.00	75.01	0.1255	236.2789	0.031503	3.3068	0.006226	90.00956	11.2512
	02-04-2015 23	99	103	1831.7	0.3370	617.3	1.8867	3455.8	187.9	1.00	72.98	0.1255	229.8784	0.03065	3.3068	0.006057	87.57131	10.94641
	02-05-2015 00	99	100	1806.2	0.3370	608.7	1.8782	3392.4	185.3	1.00	71.96	0.1255	226.6781	0.030223	3.3068	0.005973	86.35219	10.79402
	02-05-2015 01	98	100	1795.3	0.3430	615.8	1.8890	3391.4	184.2	1.00	71.53	0.1255	225.3102	0.030041	3.3068	0.005937	85.83108	10.72888
	02-05-2015 02	99	100	1802.4	0.3390	611.0	1.8848	3397.1	184.9	1.00	71.81	0.1255	226.2012	0.03016	3.3068	0.00596	86.17052	10.77131
	02-05-2015 03	103	100	1844.3	0.3270	603.1	1.8861	3478.5	189.2	1.00	73.48	0.1255	231.4597	0.030861	3.3068	0.006099	88.17371	11.02171
	02-05-2015 04	98	100	1810.7	0.3370	610.2	1.8713	3388.4	185.8	1.00	72.14	0.1255	227.2429	0.030299	3.3068	0.005988	86.56733	10.82092
	02-05-2015 05	106	111	1981.1	0.3290	651.8	1.8897	3743.7	203.3	1.00	78.93	0.1255	248.6281	0.03315	3.3068	0.006551	94.71394	11.83924

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-05-2015 06	138	141	2494.3	0.3740	932.9	1.9197	4788.3	255.9	1.00	99.37	0.1255	313.0347	0.041737	3.3068	0.008248	119.2494	14.90618
	02-05-2015 07	148	151	2639.4	0.3900	1029.4	1.9379	5114.9	270.8	1.00	105.16	0.1255	331.2447	0.044165	3.3068	0.008728	126.1865	15.77331
	02-05-2015 08	127	136	2372.5	0.4250	1008.3	1.9133	4539.3	243.4	1.00	94.52	0.1255	297.7488	0.039699	3.3068	0.007845	113.4263	14.17829
	02-05-2015 09	135	147	2518.4	0.4090	1030.0	1.9285	4856.7	258.4	1.00	100.33	0.1255	316.0592	0.042141	3.3068	0.008328	120.4016	15.0502
	02-05-2015 10	162	162	2885.3	0.3650	1053.1	1.9425	5604.8	296.0	1.00	114.95	0.1255	362.1052	0.04828	3.3068	0.009541	137.9426	17.24283
	02-05-2015 11	168	170	3015.3	0.3590	1082.5	1.9457	5867.0	309.4	1.00	120.13	0.1255	378.4202	0.050455	3.3068	0.009971	144.1578	18.01972
	02-05-2015 12	158	164	2851.6	0.3680	1049.4	1.9425	5539.3	292.6	1.00	113.61	0.1255	357.8758	0.047716	3.3068	0.00943	136.3315	17.04143
	02-05-2015 13	145	150	2594.1	0.3790	983.2	1.9391	5030.3	266.2	1.00	103.35	0.1255	325.5596	0.043407	3.3068	0.008578	124.0207	15.50259
	02-05-2015 14	129	136	2344.7	0.3930	921.5	1.9406	4550.2	240.6	1.00	93.41	0.1255	294.2599	0.039234	3.3068	0.007753	112.0972	14.01215
	02-05-2015 15	123	132	2291.6	0.3810	873.1	1.9393	4444.2	235.1	1.00	91.30	0.1255	287.5958	0.038345	3.3068	0.007578	109.5586	13.69482
	02-05-2015 16	120	126	2210.4	0.3890	859.8	1.9515	4313.6	226.8	1.00	88.06	0.1255	277.4052	0.036987	3.3068	0.007309	105.6765	13.20956
	02-05-2015 17	145	160	2718.8	0.3800	1033.1	1.9631	5337.2	279.0	1.00	108.32	0.1255	341.2094	0.045494	3.3068	0.00899	129.9825	16.24781
	02-05-2015 18	163	171	2962.6	0.3710	1099.1	1.9739	5848.0	304.0	1.00	118.03	0.1255	371.8063	0.049573	3.3068	0.009797	141.6382	17.70478
	02-05-2015 19	169	175	3046.3	0.3710	1130.2	1.9793	6029.6	312.5	1.00	121.37	0.1255	382.3107	0.050974	3.3068	0.010073	145.6398	18.20498
	02-05-2015 20	170	175	3052.8	0.3810	1163.1	1.9787	6040.6	313.2	1.00	121.63	0.1255	383.1264	0.051083	3.3068	0.010095	145.9506	18.24382
	02-05-2015 21	170	175	3040.1	0.3740	1137.0	1.9836	6030.2	311.9	1.00	121.12	0.1255	381.5326	0.05087	3.3068	0.010053	145.3434	18.16793
	02-05-2015 22	170	176	3063.8	0.3690	1130.5	1.9715	6040.3	314.3	1.00	122.06	0.1255	384.5069	0.051267	3.3068	0.010131	146.4765	18.30956
	02-05-2015 23	164	169	2921.5	0.3760	1098.5	1.9941	5825.7	299.8	1.00	116.39	0.1255	366.6483	0.048886	3.3068	0.009661	139.6733	17.45916
	02-06-2015 00	132	149	2488.7	0.3900	970.6	1.9935	4961.2	255.3	1.00	99.15	0.1255	312.3319	0.041644	3.3068	0.00823	118.9817	14.87271
	02-06-2015 01	159	169	2910.4	0.3530	1027.4	2.0002	5821.4	298.6	1.00	115.95	0.1255	365.2552	0.0487	3.3068	0.009624	139.1426	17.39283
	02-06-2015 02	170	161	2926.4	0.3670	1074.0	2.0107	5884.2	300.3	1.00	116.59	0.1255	367.2632	0.048968	3.3068	0.009677	139.9076	17.48845
	02-06-2015 03	170	173	3026.7	0.3530	1068.4	2.0307	6146.2	310.5	1.00	120.59	0.1255	379.8509	0.050646	3.3068	0.010009	144.7028	18.08785
	02-06-2015 04	161	164	2877.2	0.3510	1009.9	2.0442	5881.5	295.2	1.00	114.63	0.1255	361.0886	0.048144	3.3068	0.009514	137.5554	17.19442
	02-06-2015 05	165	169	2957.1	0.3450	1020.2	2.0306	6004.7	303.4	1.00	117.81	0.1255	371.1161	0.049481	3.3068	0.009778	141.3753	17.67191
	02-06-2015 06	171	174	3056.1	0.3560	1088.0	2.0492	6262.5	313.6	1.00	121.76	0.1255	383.5406	0.051138	3.3068	0.010106	146.1084	18.26355
	02-06-2015 07	171	176	3061.9	0.3460	1059.4	2.0336	6226.8	314.2	1.00	121.99	0.1255	384.2685	0.051235	3.3068	0.010125	146.3857	18.29821
	02-06-2015 08	171	177	3071.6	0.3490	1072.0	2.0064	6162.9	315.1	1.00	122.37	0.1255	385.4858	0.051397	3.3068	0.010157	146.8494	18.35618
	02-06-2015 09	171	176	3051.7	0.3500	1068.1	2.0267	6185.0	313.1	1.00	121.58	0.1255	382.9884	0.051064	3.3068	0.010091	145.898	18.23725
	02-06-2015 10	167	174	3001.0	0.3510	1053.4	2.0330	6101.1	307.9	1.00	119.56	0.1255	376.6255	0.050216	3.3068	0.009924	143.4741	17.93426
	02-06-2015 11	160	170	2902.9	0.3370	978.3	2.0196	5862.8	297.8	1.00	115.65	0.1255	364.314	0.048574	3.3068	0.009599	138.7841	17.34801
	02-06-2015 12	155	160	2737.1	0.3300	903.2	2.0418	5588.7	280.8	1.00	109.05	0.1255	343.5061	0.0458	3.3068	0.009051	130.8574	16.35717
	02-06-2015 13	161	168	2881.9	0.3380	974.1	2.0310	5853.1	295.7	1.00	114.82	0.1255	361.6785	0.048223	3.3068	0.00953	137.7801	17.22251
	02-06-2015 14	129	133	2301.4	0.3810	876.8	2.0388	4692.1	236.1	1.00	91.69	0.1255	288.8257	0.038509	3.3068	0.00761	110.0271	13.75339
	02-06-2015 15	108	122	2058.7	0.3610	743.2	2.0179	4154.2	211.2	1.00	82.02	0.1255	258.3669	0.034448	3.3068	0.006808	98.4239	12.30299
	02-06-2015 16	126	132	2303.1	0.3770	868.3	2.0231	4659.3	236.3	1.00	91.76	0.1255	289.0391	0.038538	3.3068	0.007616	110.1084	13.76355
	02-06-2015 17	132	145	2460.8	0.3750	922.8	2.0387	5016.8	252.5	1.00	98.04	0.1255	308.8304	0.041177	3.3068	0.008137	117.6478	14.70598
	02-06-2015 18	162	169	2901.9	0.3430	995.4	2.0448	5933.8	297.7	1.00	115.61	0.1255	364.1885	0.048558	3.3068	0.009596	138.7363	17.34203
	02-06-2015 19	160	166	2869.5	0.3460	992.8	2.0336	5835.5	294.4	1.00	114.32	0.1255	360.1223	0.048016	3.3068	0.009489	137.1873	17.14841
	02-06-2015 20	155	165	2798.1	0.3530	987.7	2.0431	5716.9	287.1	1.00	111.48	0.1255	351.1616	0.046821	3.3068	0.009253	133.7737	16.72171
	02-06-2015 21	144	154	2635.5	0.3530	930.3	2.0306	5351.7	270.4	1.00	105.00	0.1255	330.7553	0.0441	3.3068	0.008715	126	15.75
	02-06-2015 22	140	151	2567.3	0.3620	929.4	2.0389	5234.5	263.4	1.00	102.28	0.1255	322.1962	0.042959	3.3068	0.008489	122.7394	15.34243
	02-06-2015 23	106	109	1928.1	0.3700	713.4	2.0126	3880.4	197.8	1.00	76.82	0.1255	241.9766	0.032263	3.3068	0.006376	92.18008	11.52251
	02-07-2015 00	98	104	1830.5	0.3540	648.0	2.0129	3684.6	187.8	1.00	72.93	0.1255	229.7278	0.03063	3.3068	0.006053	87.51394	10.93924
	02-07-2015 01	98	101	1804.5	0.3490	629.8	2.0205	3646.0	185.1	1.00	71.89	0.1255	226.4648	0.030195	3.3068	0.005967	86.27092	10.78386
	02-07-2015 02	99	106	1865.3	0.3410	636.1	2.0056	3741.1	191.4	1.00	74.31	0.1255	234.0952	0.031212	3.3068	0.006168	89.17769	11.14721
	02-07-2015 03	99	99	1805.8	0.3400	614.0	2.0043	3619.3	185.3	1.00	71.94	0.1255	226.6279	0.030217	3.3068	0.005971	86.33307	10.79163
	02-07-2015 04	100	100	1814.3	0.3400	616.9	2.0066	3640.5	186.1	1.00	72.28	0.1255	227.6947	0.030359	3.3068	0.005999	86.73944	10.84243

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-07-2015 05	106	113	1976.1	0.3220	636.3	2.0123	3976.5	202.7	1.00	78.73	0.1255	248.0006	0.033066	3.3068	0.006535	94.4749	11.80936
	02-07-2015 06	102	109	1912.3	0.3430	655.9	2.0106	3844.8	196.2	1.00	76.19	0.1255	239.9937	0.031999	3.3068	0.006324	91.4247	11.42809
	02-07-2015 07	110	120	2073.5	0.3350	694.6	2.0078	4163.1	212.7	1.00	82.61	0.1255	260.2243	0.034696	3.3068	0.006857	99.13147	12.39143
	02-07-2015 08	125	138	2362.8	0.3430	810.4	2.0171	4765.9	242.4	1.00	94.14	0.1255	296.5314	0.039537	3.3068	0.007813	112.9625	14.12032
	02-07-2015 09	150	165	2826.3	0.3490	986.4	2.0173	5701.6	290.0	1.00	112.60	0.1255	354.7007	0.047293	3.3068	0.009346	135.1219	16.89024
	02-07-2015 10	148	150	2635.6	0.3600	948.8	2.0331	5358.4	270.4	1.00	105.00	0.1255	330.7678	0.044102	3.3068	0.008715	126.0048	15.7506
	02-07-2015 11	102	126	2072.0	0.4050	839.2	1.9950	4133.7	212.6	1.00	82.55	0.1255	260.036	0.034671	3.3068	0.006852	99.05976	12.38247
	02-07-2015 12	95	114	1920.7	0.3880	745.2	1.9860	3814.6	197.1	1.00	76.52	0.1255	241.0479	0.032139	3.3068	0.006351	91.82629	11.47829
	02-07-2015 13	93	101	1808.8	0.4050	732.6	1.9794	3580.4	185.6	1.00	72.06	0.1255	227.0044	0.030267	3.3068	0.005981	86.47649	10.80956
	02-07-2015 14	93	102	1802.8	0.4060	731.9	1.9809	3571.1	185.0	1.00	71.82	0.1255	226.2514	0.030166	3.3068	0.005961	86.18964	10.77371
	02-07-2015 15	94	101	1782.8	0.4300	766.6	1.9928	3552.7	182.9	1.00	71.03	0.1255	223.7414	0.029832	3.3068	0.005895	85.23347	10.65418
	02-07-2015 16	93	106	1811.7	0.4380	793.5	2.0006	3624.4	185.9	1.00	72.18	0.1255	227.3684	0.030315	3.3068	0.005991	86.61514	10.82689
	02-07-2015 17	93	101	1784.6	0.4360	778.1	1.9895	3550.4	183.1	1.00	71.10	0.1255	223.9673	0.029862	3.3068	0.005901	85.31952	10.66494
	02-07-2015 18	115	129	2204.1	0.4050	892.7	1.9975	4402.6	226.1	1.00	87.81	0.1255	276.6146	0.036881	3.3068	0.007288	105.3753	13.17191
	02-07-2015 19	110	102	1933.1	0.4330	837.0	1.9927	3852.0	198.3	1.00	77.02	0.1255	242.6041	0.032347	3.3068	0.006392	92.41912	11.55239
	02-07-2015 20	98	101	1820.8	0.3890	708.3	1.9937	3630.1	186.8	1.00	72.54	0.1255	228.5104	0.030468	3.3068	0.006021	87.0502	10.88127
	02-07-2015 21	98	105	1841.1	0.3820	703.3	2.0033	3588.2	188.9	1.00	73.35	0.1255	221.0581	0.030807	3.3068	0.006088	88.02072	11.00259
	02-07-2015 22	98	100	1797.5	0.3720	668.7	1.9939	3584.1	184.4	1.00	71.61	0.1255	225.5863	0.030078	3.3068	0.005944	85.93625	10.74203
	02-07-2015 23	98	100	1808.0	0.3450	623.8	1.9947	3606.5	185.5	1.00	72.03	0.1255	226.904	0.030253	3.3068	0.005979	86.43825	10.80478
	02-08-2015 00	98	100	1821.1	0.3400	619.2	1.9955	3634.0	186.8	1.00	72.55	0.1255	228.5481	0.030473	3.3068	0.006022	87.06454	10.88307
	02-08-2015 01	97	100	1787.3	0.3530	630.9	1.9989	3572.7	183.4	1.00	71.21	0.1255	224.3062	0.029907	3.3068	0.00591	85.44861	10.68108
	02-08-2015 02	98	100	1824.0	0.3480	634.8	1.9862	3622.8	187.1	1.00	72.67	0.1255	228.912	0.030521	3.3068	0.006032	87.20319	10.9004
	02-08-2015 03	98	99	1786.1	0.3550	634.1	1.9863	3547.7	183.2	1.00	71.16	0.1255	224.1556	0.029887	3.3068	0.005906	85.39124	10.6739
	02-08-2015 04	98	99	1794.8	0.3580	642.5	1.9801	3553.8	184.1	1.00	71.51	0.1255	225.2474	0.030033	3.3068	0.005935	85.80717	10.7259
	02-08-2015 05	98	99	1784.6	0.3570	637.1	1.9795	3532.6	183.1	1.00	71.10	0.1255	223.9673	0.029862	3.3068	0.005901	85.31952	10.66494
	02-08-2015 06	97	100	1788.0	0.3620	647.3	1.9918	3561.4	183.4	1.00	71.24	0.1255	224.394	0.029919	3.3068	0.005913	85.48207	10.68526
	02-08-2015 07	98	100	1790.3	0.3600	644.5	1.9899	3562.5	183.7	1.00	71.33	0.1255	224.6827	0.029957	3.3068	0.00592	85.59203	10.699
	02-08-2015 08	97	100	1780.0	0.3530	628.3	1.9919	3545.6	182.6	1.00	70.92	0.1255	223.39	0.029785	3.3068	0.005886	85.0996	10.63745
	02-08-2015 09	98	100	1806.4	0.3470	626.8	1.9804	3577.4	185.3	1.00	71.97	0.1255	226.7032	0.030227	3.3068	0.005973	86.36175	10.79522
	02-08-2015 10	98	101	1824.6	0.3470	633.1	1.9854	3622.5	187.2	1.00	72.69	0.1255	228.9873	0.030531	3.3068	0.006034	87.23187	10.90398
	02-08-2015 11	98	104	1826.7	0.3510	641.2	1.9920	3638.8	187.4	1.00	72.78	0.1255	229.2509	0.030566	3.3068	0.00604	87.33227	10.91653
	02-08-2015 12	98	100	1796.8	0.3490	627.1	1.9867	3569.7	184.4	1.00	71.59	0.1255	225.4984	0.030066	3.3068	0.005942	85.90279	10.73785
	02-08-2015 13	98	100	1789.4	0.3510	628.1	1.9843	3550.7	183.6	1.00	71.29	0.1255	224.5697	0.029942	3.3068	0.005917	85.549	10.69363
	02-08-2015 14	97	100	1790.8	0.3480	623.2	1.9823	3549.9	183.7	1.00	71.35	0.1255	224.7454	0.029966	3.3068	0.005922	85.61594	10.70199
	02-08-2015 15	97	100	1786.1	0.3480	621.6	1.9844	3544.3	183.3	1.00	71.16	0.1255	224.1556	0.029887	3.3068	0.005906	85.39124	10.6739
	02-08-2015 16	97	100	1793.9	0.3510	629.7	1.9804	3552.6	184.1	1.00	71.47	0.1255	225.1345	0.030017	3.3068	0.005932	85.76414	10.72052
	02-08-2015 17	97	100	1792.6	0.3490	625.6	1.9890	3565.5	183.9	1.00	71.42	0.1255	224.9713	0.029996	3.3068	0.005928	85.70199	10.71275
	02-08-2015 18	97	100	1794.2	0.3490	626.2	1.9770	3547.2	184.1	1.00	71.48	0.1255	225.1721	0.030022	3.3068	0.005933	85.77849	10.72231
	02-08-2015 19	97	100	1791.5	0.3500	627.0	1.9853	3556.7	183.8	1.00	71.37	0.1255	224.8333	0.029977	3.3068	0.005924	85.6494	10.70618
	02-08-2015 20	98	101	1801.8	0.3490	628.8	1.9920	3589.2	184.9	1.00	71.78	0.1255	226.1259	0.03015	3.3068	0.005958	86.14183	10.76773
	02-08-2015 21	98	103	1820.0	0.3460	629.7	1.9883	3618.7	186.7	1.00	72.51	0.1255	228.41	0.030454	3.3068	0.006018	87.01195	10.87649
	02-08-2015 22	98	100	1792.2	0.3480	623.7	1.9903	3567.0	183.9	1.00	71.40	0.1255	224.9211	0.029989	3.3068	0.005926	85.68287	10.71036
	02-08-2015 23	98	100	1795.2	0.3490	626.5	1.9817	3557.6	184.2	1.00	71.52	0.1255	225.2976	0.030039	3.3068	0.005936	85.82629	10.72829
	02-09-2015 00	97	99	1791.0	0.3490	625.1	1.9857	3556.4	183.8	1.00	71.35	0.1255	224.7705	0.029969	3.3068	0.005922	85.6255	10.70319
	02-09-2015 01	98	100	1791.1	0.3460	619.7	1.9867	3558.4	183.8	1.00	71.36	0.1255	224.7831	0.029971	3.3068	0.005923	85.63028	10.70378
	02-09-2015 02	98	100	1799.0	0.3420	615.3	1.9930	3585.4	184.6	1.00	71.67	0.1255	225.7745	0.030103	3.3068	0.005949	86.00797	10.751
	02-09-2015 03	97	100	1796.6	0.3450	619.8	1.9930	3580.6	184.3	1.00	71.58	0.1255	225.4733	0.030063	3.3068	0.005941	85.89323	10.73665

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substacked Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (Lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-09-2015 04	98	100	1795.4	0.3430	615.8	1.9963	3584.2	184.2	1.00	71.53	0.1255	225.3227	0.030043	3.3068	0.005937	85.83586	10.72948
	02-09-2015 05	98	100	1799.3	0.3370	606.4	1.9734	3550.7	184.6	1.00	71.69	0.1255	225.8122	0.030108	3.3068	0.00595	86.02231	10.75279
	02-09-2015 06	109	119	2084.3	0.3240	675.3	1.9965	4161.4	213.9	1.00	83.04	0.1255	261.5797	0.034877	3.3068	0.006892	99.64781	12.45598
	02-09-2015 07	120	127	2241.8	0.3790	849.6	2.0023	4488.7	230.0	1.00	89.31	0.1255	281.3459	0.037512	3.3068	0.007413	107.1777	13.39721
	02-09-2015 08	126	130	2291.0	0.3870	886.6	2.0022	4587.1	235.1	1.00	91.27	0.1255	287.5205	0.038335	3.3068	0.007576	109.5299	13.69124
	02-09-2015 09	127	148	2473.3	0.4010	991.8	2.0049	4958.6	253.8	1.00	98.54	0.1255	310.3992	0.041386	3.3068	0.008179	118.2454	14.78068
	02-09-2015 10	127	146	2453.0	0.3890	954.2	1.9850	4869.2	251.7	1.00	97.73	0.1255	307.8515	0.041046	3.3068	0.008112	117.2749	14.65936
	02-09-2015 11	126	145	2449.9	0.3780	926.1	1.9882	4870.8	251.4	1.00	97.61	0.1255	307.4625	0.040994	3.3068	0.008101	117.1267	14.64084
	02-09-2015 12	127	131	2320.7	0.3770	874.9	1.9972	4634.9	238.1	1.00	92.46	0.1255	291.2479	0.038832	3.3068	0.007674	110.9498	13.86873
	02-09-2015 13	125	102	2072.8	0.4060	841.6	1.9766	4097.2	212.7	1.00	82.58	0.1255	260.1364	0.034684	3.3068	0.006854	99.09801	12.38725
	02-09-2015 14	120	101	2009.5	0.4050	813.8	1.9867	3992.2	206.2	1.00	80.06	0.1255	252.1923	0.033625	3.3068	0.006645	96.07171	12.00896
	02-09-2015 15	108	112	1997.3	0.3650	729.0	1.9803	3955.3	204.9	1.00	79.57	0.1255	250.6612	0.033421	3.3068	0.006605	95.48845	11.93606
	02-09-2015 16	102	109	1921.9	0.3610	693.8	1.9753	3796.4	197.2	1.00	76.57	0.1255	241.1985	0.032159	3.3068	0.006355	91.88367	11.48546
	02-09-2015 17	128	105	2126.8	0.3660	778.4	1.9576	4163.5	218.2	1.00	84.73	0.1255	266.9134	0.035588	3.3068	0.007033	101.6797	12.70996
	02-09-2015 18	134	118	2267.3	0.3760	852.5	1.9592	4442.1	232.6	1.00	90.33	0.1255	284.5462	0.037939	3.3068	0.007497	108.3968	13.5496
	02-09-2015 19	134	130	2380.5	0.3610	859.4	1.9444	4628.8	244.2	1.00	94.84	0.1255	298.7653	0.039835	3.3068	0.007872	113.8135	14.22669
	02-09-2015 20	147	140	2590.5	0.3440	891.1	1.9370	5017.7	265.8	1.00	103.21	0.1255	325.1078	0.043347	3.3068	0.008566	123.8486	15.48108
	02-09-2015 21	143	159	2695.1	0.3600	970.2	1.9394	5226.9	276.5	1.00	107.37	0.1255	338.2351	0.045097	3.3068	0.008912	128.8494	16.10618
	02-09-2015 22	115	118	2085.1	0.4020	838.2	1.9212	4005.8	213.9	1.00	83.07	0.1255	261.6801	0.03489	3.3068	0.006895	99.68606	12.46076
	02-09-2015 23	102	107	1890.5	0.3940	744.9	1.8905	3573.9	194.0	1.00	75.32	0.1255	237.2578	0.031634	3.3068	0.006251	90.38247	11.29781
	02-10-2015 00	100	103	1850.2	0.3870	716.0	1.8824	3482.8	189.8	1.00	73.71	0.1255	232.2001	0.03096	3.3068	0.006118	88.45578	11.05697
	02-10-2015 01	102	105	1891.8	0.3670	694.3	1.8702	3538.0	194.1	1.00	75.37	0.1255	237.4209	0.031656	3.3068	0.006256	90.44462	11.30558
	02-10-2015 02	99	101	1844.6	0.3810	702.8	1.8600	3431.0	189.3	1.00	73.49	0.1255	231.4973	0.030866	3.3068	0.0061	88.18805	11.02351
	02-10-2015 03	103	108	1936.7	0.3630	703.0	1.8600	3602.2	198.7	1.00	77.16	0.1255	243.0559	0.032407	3.3068	0.006404	92.59124	11.5739
	02-10-2015 04	99	105	1878.8	0.3790	712.1	1.8505	3476.8	192.8	1.00	74.85	0.1255	235.7894	0.031438	3.3068	0.006213	89.82311	11.22789
	02-10-2015 05	109	120	2083.9	0.3540	737.7	1.8369	3828.0	213.8	1.00	83.02	0.1255	261.5295	0.03487	3.3068	0.006891	99.62869	12.45359
	02-10-2015 06	144	160	2746.1	0.3700	1016.1	1.8802	5163.3	281.7	1.00	109.41	0.1255	344.6356	0.045951	3.3068	0.009081	131.2876	16.41096
	02-10-2015 07	170	176	3077.3	0.3980	1224.8	1.8794	5783.5	315.7	1.00	122.60	0.1255	386.2012	0.051493	3.3068	0.010176	147.1219	18.39024
	02-10-2015 08	156	174	2923.4	0.3730	1090.4	1.8730	5475.6	299.9	1.00	116.47	0.1255	366.8867	0.048917	3.3068	0.009667	139.7641	17.47052
	02-10-2015 09	153	153	2730.9	0.3440	939.4	1.8629	5087.4	280.2	1.00	108.80	0.1255	342.728	0.045696	3.3068	0.00903	130.561	16.32012
	02-10-2015 10	167	171	3020.9	0.3600	1087.5	1.8622	5625.5	309.9	1.00	120.35	0.1255	379.123	0.050549	3.3068	0.009989	144.4255	18.05319
	02-10-2015 11	169	173	3030.9	0.3640	1103.2	1.8568	5627.7	311.0	1.00	120.75	0.1255	380.378	0.050716	3.3068	0.010022	144.9036	18.11295
	02-10-2015 12	149	145	2612.0	0.3280	856.7	1.8631	4856.3	268.0	1.00	104.06	0.1255	327.806	0.043707	3.3068	0.008637	124.8765	15.60956
	02-10-2015 13	136	144	2506.8	0.3360	842.3	1.8750	4700.2	257.2	1.00	99.87	0.1255	314.6034	0.041946	3.3068	0.008289	119.847	14.98088
	02-10-2015 14	106	116	2006.9	0.3300	662.3	1.8622	3737.2	205.9	1.00	79.96	0.1255	251.866	0.033582	3.3068	0.006636	95.94741	11.99343
	02-10-2015 15	99	102	1846.4	0.3070	566.8	1.8389	3395.4	189.4	1.00	73.56	0.1255	231.7232	0.030896	3.3068	0.006106	88.2741	11.03426
	02-10-2015 16	101	101	1862.2	0.2950	549.3	1.8391	3424.8	191.1	1.00	74.19	0.1255	233.7061	0.03116	3.3068	0.006158	89.02948	11.12869
	02-10-2015 17	130	117	2254.4	0.3060	689.8	1.8796	4237.4	231.3	1.00	89.82	0.1255	282.9272	0.037723	3.3068	0.007455	107.7801	13.47251
	02-10-2015 18	157	164	2863.8	0.3450	988.0	1.8852	5398.9	293.8	1.00	114.10	0.1255	359.4069	0.04792	3.3068	0.00947	136.9147	17.11434
	02-10-2015 19	148	167	2823.4	0.3460	976.9	1.8764	5297.7	289.7	1.00	112.49	0.1255	354.3367	0.047244	3.3068	0.009336	134.9833	16.87291
	02-10-2015 20	148	170	2852.6	0.3430	978.4	1.8773	5355.3	292.7	1.00	113.65	0.1255	358.0013	0.047733	3.3068	0.009433	136.3793	17.04741
	02-10-2015 21	150	156	2732.1	0.3450	942.6	1.8830	5144.6	280.3	1.00	108.85	0.1255	342.8786	0.045716	3.3068	0.009034	130.6183	16.32729
	02-10-2015 22	107	116	2017.4	0.3570	720.2	1.8542	3740.7	207.0	1.00	80.37	0.1255	253.1837	0.033757	3.3068	0.006671	96.4494	12.05618
	02-10-2015 23	99	104	1855.3	0.3370	625.2	1.8509	3433.9	190.3	1.00	73.92	0.1255	232.8402	0.031045	3.3068	0.006135	88.6996	11.08745
	02-11-2015 00	95	102	1828.8	0.3310	605.3	1.8515	3386.0	187.6	1.00	72.86	0.1255	229.5144	0.030601	3.3068	0.006047	87.43267	10.92908
	02-11-2015 01	94	119	1964.5	0.3310	650.2	1.8496	3633.5	201.6	1.00	78.27	0.1255	246.5448	0.032872	3.3068	0.006496	93.92032	11.74004
	02-11-2015 02	107	96	1886.0	0.3190	601.6	1.8677	3522.5	193.5	1.00	75.14	0.1255	236.693	0.031559	3.3068	0.006237	90.16733	11.27092

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Substituted Data	Date/Hour	YTO1 Gross Load MW Value	YTO2 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/Hr)	HCl (lb/hr)	HF (lb/hr)
	02-11-2015 03	110	98	1910.6	0.3250	620.9	1.8933	3617.4	196.0	1.00	76.12	0.1255	239.7803	0.03197	3.3068	0.006318	91.34343	11.41793
	02-11-2015 04	109	99	1930.4	0.3190	615.8	1.8995	3666.8	198.1	1.00	76.91	0.1255	242.2652	0.032302	3.3068	0.006383	92.29004	11.53625
	02-11-2015 05	118	125	2221.6	0.3260	724.2	1.9247	4275.9	227.9	1.00	88.51	0.1255	278.8108	0.037174	3.3068	0.007346	106.212	13.27649
	02-11-2015 06	159	173	2975.6	0.3630	1080.1	1.9467	5792.7	305.3	1.00	118.55	0.1255	373.4378	0.049791	3.3068	0.00984	142.2598	17.78247
	02-11-2015 07	165	176	3062.9	0.3920	1200.7	1.9440	5954.4	314.3	1.00	122.03	0.1255	384.394	0.051252	3.3068	0.010128	146.4335	18.30418
	02-11-2015 08	164	176	3037.1	0.3880	1178.4	1.9569	5943.2	311.6	1.00	121.00	0.1255	381.1561	0.05082	3.3068	0.010043	145.2	18.15
	02-11-2015 09	151	174	2890.6	0.3780	1092.6	1.9674	5687.1	296.6	1.00	115.16	0.1255	362.7703	0.048369	3.3068	0.009559	138.196	17.2745
	02-11-2015 10	132	147	2499.4	0.4150	1037.3	1.9579	4893.6	256.4	1.00	99.58	0.1255	313.6747	0.041823	3.3068	0.008265	119.4932	14.93665
	02-11-2015 11	124	141	2371.8	0.4240	1005.6	1.9451	4613.4	243.3	1.00	94.49	0.1255	297.7864	0.039704	3.3068	0.007846	113.4406	14.18008
	02-11-2015 12	123	140	2372.8	0.3870	918.3	1.9457	4616.7	243.4	1.00	94.53	0.1255	297.7864	0.039704	3.3068	0.007846	113.4406	14.18008
	02-11-2015 13	94	106	1833.1	0.3140	575.6	1.9216	3522.5	188.1	1.00	73.03	0.1255	230.0541	0.030673	3.3068	0.006062	87.63825	10.95478
	02-11-2015 14	76	100	1650.4	0.2550	420.9	1.9113	3154.4	169.3	1.00	65.75	0.1255	207.1252	0.027616	3.3068	0.005457	78.90359	9.862948
	02-11-2015 15	79	103	1703.8	0.2370	403.8	1.9259	3281.3	174.8	1.00	67.88	0.1255	213.8269	0.02851	3.3068	0.005634	81.45657	10.18207
	02-11-2015 16	112	131	2255.3	0.2840	640.5	1.9962	4502.1	231.4	1.00	89.85	0.1255	283.0402	0.037738	3.3068	0.007458	107.8231	13.47789
	02-11-2015 17	125	139	2418.1	0.3540	856.0	1.9942	4822.2	248.1	1.00	96.34	0.1255	303.4716	0.040462	3.3068	0.007996	115.6064	14.4508
	02-11-2015 18	133	161	2632.5	0.3400	895.1	2.0161	5307.3	270.1	1.00	104.88	0.1255	330.3788	0.04405	3.3068	0.008705	125.8566	15.73207
	02-11-2015 19	140	170	2761.9	0.3320	917.0	2.0399	5633.9	283.4	1.00	110.04	0.1255	346.6185	0.046215	3.3068	0.009133	132.043	16.50538
	02-11-2015 20	137	162	2683.0	0.3340	896.1	2.0327	5453.8	275.3	1.00	106.89	0.1255	336.7165	0.044895	3.3068	0.008872	128.2709	16.03386
	02-11-2015 21	135	150	2549.1	0.3260	831.0	2.0530	5233.2	261.5	1.00	101.56	0.1255	319.9121	0.042654	3.3068	0.008429	121.8693	15.23367
	02-11-2015 22	127	127	2287.3	0.3400	777.7	2.0556	4701.8	234.7	1.00	91.13	0.1255	287.0562	0.038274	3.3068	0.007564	109.353	13.66912
	02-11-2015 23	126	119	2219.9	0.3360	745.9	2.0686	4592.0	227.8	1.00	88.44	0.1255	278.5975	0.037146	3.3068	0.007341	106.1307	13.26633
	02-12-2015 00	112	112	2036.5	0.3480	708.7	2.0628	4200.8	208.9	1.00	81.14	0.1255	255.5808	0.034077	3.3068	0.006734	97.36255	12.17032
	02-12-2015 01	98	100	1848.0	0.3310	611.7	2.0407	3771.3	189.6	1.00	73.63	0.1255	231.924	0.030923	3.3068	0.006111	88.3506	11.04382
	02-12-2015 02	98	100	1838.2	0.3280	602.9	2.0538	3775.3	188.6	1.00	73.24	0.1255	230.6941	0.030759	3.3068	0.006079	87.88207	10.98526
	02-12-2015 03	98	100	1842.1	0.3370	620.8	2.0603	3795.3	189.0	1.00	73.39	0.1255	231.1836	0.030824	3.3068	0.006091	88.06853	11.00857
	02-12-2015 04	98	100	1838.6	0.3370	619.6	2.0624	3792.0	188.6	1.00	73.25	0.1255	230.7443	0.030765	3.3068	0.00608	87.9012	10.98765
TRUE	02-12-2015 05	98	100	1839.2	0.3880	713.6	2.0649	3797.7	188.7	1.00	73.27	0.1255	230.8196	0.030775	3.3068	0.006082	87.92988	10.99124
TRUE	02-12-2015 06	106	112	1966.1	0.3880	762.3	2.0837	4095.8	201.7	1.00	78.33	0.1255	246.7456	0.032899	3.3068	0.006501	93.99681	11.7496
	02-12-2015 07	120	134	2307.2	0.3720	858.3	2.0873	4815.9	236.7	1.00	91.92	0.1255	289.5536	0.038607	3.3068	0.007629	110.3044	13.78805
	02-12-2015 08	137	154	2636.7	0.4040	1065.2	2.0812	5487.5	270.5	1.00	105.05	0.1255	330.9059	0.04412	3.3068	0.008719	126.0574	15.75717
	02-12-2015 09	168	168	3017.5	0.4200	1267.4	2.0888	6303.1	309.6	1.00	120.22	0.1255	378.6963	0.050492	3.3068	0.009978	144.2629	18.03287
	02-12-2015 10	169	169	3027.5	0.4260	1289.7	2.0931	6336.9	310.6	1.00	120.62	0.1255	379.9513	0.050659	3.3068	0.010011	144.741	18.09263
	02-12-2015 11	157	158	2826.3	0.4080	1153.1	2.0836	5888.9	290.0	1.00	112.60	0.1255	354.7007	0.047293	3.3068	0.009346	135.1219	16.89024
	02-12-2015 12	167	166	2965.6	0.4030	1195.1	2.0985	6223.4	304.3	1.00	118.15	0.1255	372.1828	0.049624	3.3068	0.009807	141.7817	17.72271
	02-12-2015 13	170	168	3002.6	0.4200	1261.1	2.1118	6340.9	308.1	1.00	119.63	0.1255	376.8263	0.050243	3.3068	0.009929	143.5506	17.94382
	02-12-2015 14	170	168	3022.4	0.4230	1278.5	2.1109	6380.1	310.1	1.00	120.41	0.1255	379.3112	0.050574	3.3068	0.009994	144.4972	18.06215
	02-12-2015 15	157	153	2770.0	0.3920	1085.8	2.1061	5833.8	284.2	1.00	110.36	0.1255	347.635	0.046351	3.3068	0.00916	132.4303	16.55378
	02-12-2015 16	137	141	2502.4	0.3960	991.0	2.0897	5229.3	256.7	1.00	99.70	0.1255	314.0512	0.041873	3.3068	0.008275	119.6367	14.95458
	02-12-2015 17	136	154	2619.4	0.4120	1079.2	2.0801	5448.6	268.8	1.00	104.36	0.1255	328.7347	0.043831	3.3068	0.008662	125.2303	15.55378
	02-12-2015 18	168	175	3087.5	0.4070	1256.6	2.0656	6377.6	316.8	1.00	123.01	0.1255	387.4813	0.051663	3.3068	0.01021	147.6096	18.4512
	02-12-2015 19	169	176	3101.3	0.4100	1271.5	2.0677	6412.7	318.2	1.00	123.56	0.1255	389.2132	0.051894	3.3068	0.010255	148.2693	18.53367
	02-12-2015 20	167	176	3099.9	0.4120	1277.2	2.0717	6422.0	318.1	1.00	123.50	0.1255	389.0375	0.051871	3.3068	0.010251	148.2024	18.5253
	02-12-2015 21	155	176	3013.8	0.4020	1211.5	2.0753	6254.6	309.2	1.00	120.07	0.1255	378.2319	0.05043	3.3068	0.009966	144.0861	18.01076
	02-12-2015 22	150	172	2914.5	0.4160	1212.4	2.0968	6111.2	299.0	1.00	116.12	0.1255	365.7698	0.048769	3.3068	0.009638	139.3386	17.41733
	02-12-2015 23	150	167	2869.6	0.4040	1159.3	2.0999	6026.0	294.4	1.00	114.33	0.1255	360.1348	0.048017	3.3068	0.009489	137.192	17.149
	02-13-2015 00	111	167	2494.7	0.4010	1000.4	2.0942	5224.4	256.0	1.00	99.39	0.1255	313.0849	0.041744	3.3068	0.008249	119.2685	14.90857
	02-13-2015 01	100	172	2446.7	0.3700	905.3	2.0846	5100.4	251.0	1.00	97.48	0.1255	307.0609	0.040941	3.3068	0.008091	116.9737	14.62171

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Substituted Date	Date/Hour	Y01 Gross Load MW Value	Y02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-13-2015 02	134	171	2784.8	0.3790	1055.4	2.0892	5818.0	285.7	1.00	110.95	0.1255	349.4924	0.046598	3.3068	0.009209	133.1378	16.64223
	02-13-2015 03	159	173	2971.8	0.4000	1188.7	2.1041	6253.0	304.9	1.00	118.40	0.1255	372.9609	0.049727	3.3068	0.009827	142.0781	17.75976
	02-13-2015 04	164	175	3032.9	0.4180	1267.8	2.0962	6357.6	311.2	1.00	120.83	0.1255	380.629	0.05075	3.3068	0.010029	144.9992	18.1249
TRUE	02-13-2015 05	167	170	3067.6	0.3910	1199.4	2.0882	6405.9	314.7	1.00	122.22	0.1255	384.9838	0.05133	3.3068	0.010144	146.6582	18.33227
TRUE	02-13-2015 06	158	136	2856.9	0.4160	1188.5	2.0846	5955.6	293.1	1.00	113.82	0.1255	358.541	0.047805	3.3068	0.009447	136.5849	17.07311
TRUE	02-13-2015 07	122	94	2186.9	0.3880	848.5	2.0778	4543.6	224.4	1.00	87.13	0.1255	274.456	0.036594	3.3068	0.007232	104.553	13.06912
	02-13-2015 08	98	91	1874.4	0.3420	641.0	2.0700	3880.0	192.3	1.00	74.68	0.1255	235.2372	0.031364	3.3068	0.006198	89.61275	11.20159
	02-13-2015 09	90	126	2076.1	0.3850	799.3	2.0854	4329.6	213.0	1.00	82.71	0.1255	260.5506	0.03474	3.3068	0.006865	99.25578	12.40697
	02-13-2015 10	102	106	1962.2	0.3620	710.3	2.0872	4095.5	201.3	1.00	78.18	0.1255	246.2561	0.032834	3.3068	0.006489	93.81036	11.72629
	02-13-2015 11	138	128	2472.6	0.4100	1013.8	2.1143	5227.9	253.7	1.00	98.51	0.1255	310.3113	0.041374	3.3068	0.008176	118.212	14.77649
	02-13-2015 12	169	170	3054.3	0.3910	1194.2	2.1252	6490.9	313.4	1.00	121.69	0.1255	383.3147	0.051108	3.3068	0.0101	146.0223	18.25279
	02-13-2015 13	170	171	3046.7	0.3810	1160.8	2.1257	6476.4	312.6	1.00	121.38	0.1255	382.3609	0.050981	3.3068	0.010075	145.659	18.20737
	02-13-2015 14	150	142	2625.4	0.3730	979.3	2.1171	5558.3	269.4	1.00	104.60	0.1255	329.4877	0.043931	3.3068	0.008682	125.5171	15.68964
	02-13-2015 15	128	140	2446.4	0.4050	990.8	2.1050	5149.6	251.0	1.00	97.47	0.1255	307.0232	0.040936	3.3068	0.00809	116.9594	14.61992
	02-13-2015 16	151	163	2863.2	0.3710	1062.2	2.0983	6007.8	293.8	1.00	114.07	0.1255	359.3316	0.04791	3.3068	0.009468	136.8861	17.11076
	02-13-2015 17	153	131	2595.8	0.3610	937.1	2.1050	5464.1	266.3	1.00	103.42	0.1255	325.7729	0.043436	3.3068	0.008584	124.102	15.51275
	02-13-2015 18	164	127	2661.9	0.3640	968.9	2.1083	5612.0	273.1	1.00	106.05	0.1255	334.0685	0.044542	3.3068	0.008802	127.2622	15.90777
	02-13-2015 19	166	165	3037.2	0.3920	1190.6	2.1017	6383.2	311.6	1.00	121.00	0.1255	381.1686	0.050822	3.3068	0.010043	145.2048	18.1506
	02-13-2015 20	170	170	3095.9	0.3920	1213.6	2.1117	6537.7	317.6	1.00	123.34	0.1255	388.5355	0.051804	3.3068	0.010237	148.0112	18.50139
	02-13-2015 21	171	155	2981.7	0.3740	1115.2	2.1208	6323.7	305.9	1.00	118.79	0.1255	374.2034	0.049893	3.3068	0.00986	142.5514	17.81892
	02-13-2015 22	170	136	2820.3	0.3570	1006.8	2.1083	5945.9	289.4	1.00	112.36	0.1255	353.9477	0.047192	3.3068	0.009326	134.8351	16.85438
	02-13-2015 23	169	136	2832.7	0.3570	1011.3	2.0938	5931.2	290.6	1.00	112.86	0.1255	355.5039	0.0474	3.3068	0.009367	135.4279	16.92849
	02-14-2015 00	128	135	2438.1	0.3600	877.7	2.0966	5111.7	250.1	1.00	97.14	0.1255	305.9816	0.040797	3.3068	0.008062	116.5625	14.57032
	02-14-2015 01	98	76	1643.3	0.3840	631.0	1.9426	3192.2	168.6	1.00	65.47	0.1255	206.2342	0.027497	3.3068	0.005434	78.56414	9.820518
	02-14-2015 02	128	0	1319.6	0.4460	588.5	2.0365	2687.4	135.4	1.00	52.57	0.1255	165.6098	0.022081	3.3068	0.004364	63.08845	7.886056
	02-14-2015 03	168	0	1664.3	0.4660	775.6	2.0445	3402.6	170.8	1.00	66.31	0.1255	208.8697	0.027849	3.3068	0.005503	79.56813	9.946016
	02-14-2015 04	161	0	1603.6	0.4380	702.4	2.0518	3290.2	164.5	1.00	63.89	0.1255	201.2518	0.026833	3.3068	0.005303	76.66614	9.583267
	02-14-2015 05	165	0	1618.2	0.4300	695.8	2.0418	3304.0	166.0	1.00	64.47	0.1255	203.0841	0.027077	3.3068	0.005351	77.36414	9.670518
	02-14-2015 06	165	0	1660.4	0.4250	705.7	2.0319	3373.7	170.4	1.00	66.15	0.1255	208.3802	0.027784	3.3068	0.005491	79.38167	9.922709
	02-14-2015 07	166	0	1629.5	0.4430	721.9	2.0693	3371.9	167.2	1.00	64.92	0.1255	204.5023	0.027267	3.3068	0.005388	77.90438	9.738048
	02-14-2015 08	166	0	1630.1	0.4420	720.5	2.0629	3362.7	167.2	1.00	64.94	0.1255	204.5776	0.027277	3.3068	0.00539	77.93307	9.741633
	02-14-2015 09	165	0	1642.7	0.4410	724.4	2.0645	3391.3	168.5	1.00	65.45	0.1255	206.1589	0.027487	3.3068	0.005432	78.53546	9.816932
	02-14-2015 10	165	0	1540.7	0.4390	676.4	2.1009	3236.8	158.1	1.00	61.38	0.1255	193.3579	0.025781	3.3068	0.005095	73.65896	9.207371
	02-14-2015 11	146	0	1406.9	0.4330	609.2	2.0753	2919.8	144.3	1.00	56.05	0.1255	176.566	0.023542	3.3068	0.004652	67.26215	8.407769
	02-14-2015 12	157	0	1514.4	0.4270	646.6	2.0972	3176.0	155.4	1.00	60.33	0.1255	190.0572	0.025341	3.3068	0.005008	72.40159	9.050199
	02-14-2015 13	158	0	1495.7	0.4580	685.0	2.0729	3100.5	153.5	1.00	59.59	0.1255	187.7104	0.025028	3.3068	0.004946	71.50757	8.938446
	02-14-2015 14	153	0	1482.0	0.4490	665.4	2.0661	3062.0	152.0	1.00	59.04	0.1255	185.991	0.024798	3.3068	0.004901	70.85259	8.856574
	02-14-2015 15	154	0	1488.1	0.4520	672.6	2.0602	3065.8	152.7	1.00	59.29	0.1255	186.7566	0.0249	3.3068	0.004921	71.14422	8.893028
	02-14-2015 16	163	0	1570.8	0.4710	739.8	2.0562	3229.9	161.2	1.00	62.58	0.1255	197.1354	0.026284	3.3068	0.005194	75.09801	9.387251
	02-14-2015 17	148	0	1449.6	0.4530	656.7	2.0266	2937.7	148.7	1.00	57.75	0.1255	181.9248	0.024256	3.3068	0.004793	69.30359	8.662948
	02-14-2015 18	165	0	1605.1	0.4790	768.8	2.0473	3286.2	164.7	1.00	63.95	0.1255	201.4401	0.026858	3.3068	0.005308	76.73785	9.592231
	02-14-2015 19	164	0	1602.5	0.4870	780.4	2.0371	3264.4	164.4	1.00	63.84	0.1255	201.1138	0.026815	3.3068	0.005299	76.61355	9.576693
	02-14-2015 20	160	0	1559.5	0.4780	745.4	2.0427	3185.6	160.0	1.00	62.13	0.1255	195.7173	0.026095	3.3068	0.005157	74.55777	9.319721
	02-14-2015 21	163	0	1585.3	0.4680	741.9	2.0504	3250.5	162.7	1.00	63.16	0.1255	198.9552	0.026527	3.3068	0.005242	75.79124	9.473904
	02-14-2015 22	155	0	1524.4	0.4540	692.1	2.0475	3121.2	156.4	1.00	60.73	0.1255	191.3122	0.025508	3.3068	0.005041	72.87968	9.10996
	02-14-2015 23	163	0	1570.0	0.4630	726.9	2.0672	3245.5	161.1	1.00	62.55	0.1255	197.035	0.026271	3.3068	0.005192	75.05976	9.38247
	02-15-2015 00	123	0	1185.0	0.4880	578.3	2.0569	2437.4	121.6	1.00	47.21	0.1255	148.7175	0.019829	3.3068	0.003919	56.65339	7.081673

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Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-15-2015 01	98	0	968.6	0.4390	425.2	2.0552	1990.7	99.4	1.00	38.59	0.1255	121.5593	0.016208	3.3068	0.003203	46.30757	5.788446
	02-15-2015 02	134	0	1324.4	0.4200	556.2	2.0724	2744.7	135.9	1.00	52.76	0.1255	166.2122	0.022161	3.3068	0.004379	63.31793	7.914741
	02-15-2015 03	163	0	1536.6	0.4710	723.7	2.0698	3180.5	157.7	1.00	61.22	0.1255	192.8433	0.025712	3.3068	0.005081	73.46295	9.182869
	02-15-2015 04	164	0	1547.7	0.4790	741.3	2.0445	3164.2	158.8	1.00	61.66	0.1255	194.2364	0.025898	3.3068	0.005118	73.99363	9.249203
	02-15-2015 05	164	0	1555.2	0.4710	732.5	1.9934	3100.2	159.6	1.00	61.96	0.1255	195.1776	0.026023	3.3068	0.005143	74.35219	9.294024
	02-15-2015 06	164	0	1547.6	0.4650	719.6	2.0097	3110.2	158.8	1.00	61.66	0.1255	194.2238	0.025896	3.3068	0.005118	73.98884	9.248606
	02-15-2015 07	167	0	1628.2	0.4760	775.0	2.0064	3266.8	167.0	1.00	64.87	0.1255	204.3391	0.027245	3.3068	0.005384	77.84223	9.730279
	02-15-2015 08	170	0	1676.5	0.4640	777.9	1.9826	3323.9	172.0	1.00	66.79	0.1255	210.4008	0.028053	3.3068	0.005544	80.15139	10.01892
	02-15-2015 09	170	0	1649.9	0.4690	773.8	1.9919	3286.4	169.3	1.00	65.73	0.1255	207.0625	0.027608	3.3068	0.005456	78.87968	9.85996
	02-15-2015 10	170	0	1667.1	0.4610	768.5	1.9867	3312.0	171.0	1.00	66.42	0.1255	209.2211	0.027896	3.3068	0.005513	79.70199	9.962749
	02-15-2015 11	170	0	1655.7	0.4700	778.2	2.0050	3319.6	169.9	1.00	65.96	0.1255	207.7904	0.027705	3.3068	0.005475	79.15697	9.894622
	02-15-2015 12	170	0	1664.1	0.4610	767.2	1.9757	3287.7	170.7	1.00	66.30	0.1255	208.8446	0.027845	3.3068	0.005503	79.55857	9.944821
	02-15-2015 13	170	0	1665.3	0.4520	752.7	1.9661	3274.1	170.9	1.00	66.35	0.1255	208.9952	0.027866	3.3068	0.005507	79.61594	9.951992
	02-15-2015 14	170	0	1650.7	0.4550	751.1	1.9933	3290.4	169.4	1.00	65.76	0.1255	207.1629	0.027621	3.3068	0.005458	78.91793	9.864741
	02-15-2015 15	162	0	1587.7	0.4370	693.8	2.0026	3179.5	162.9	1.00	63.25	0.1255	199.2564	0.026567	3.3068	0.00525	75.90598	9.488247
	02-15-2015 16	166	0	1628.4	0.4450	724.6	2.0122	3276.7	167.1	1.00	64.88	0.1255	204.3642	0.027248	3.3068	0.005385	77.85179	9.731474
	02-15-2015 17	170	0	1662.0	0.4550	756.2	2.0199	3357.1	170.5	1.00	66.22	0.1255	208.581	0.02781	3.3068	0.005456	79.45817	9.932271
	02-15-2015 18	170	0	1668.7	0.4680	781.0	2.0207	3371.9	171.2	1.00	66.48	0.1255	209.4219	0.027922	3.3068	0.005518	79.77849	9.972311
	02-15-2015 19	171	0	1662.5	0.4800	798.0	2.0369	3386.4	170.6	1.00	66.24	0.1255	208.6438	0.027819	3.3068	0.005498	79.48207	9.935259
	02-15-2015 20	171	0	1656.5	0.4710	780.2	2.0453	3388.1	170.0	1.00	66.00	0.1255	207.8908	0.027718	3.3068	0.005478	79.19522	9.899402
	02-15-2015 21	171	0	1659.0	0.4670	774.8	2.0495	3400.1	170.2	1.00	66.10	0.1255	208.2045	0.02776	3.3068	0.005486	79.31474	9.914343
	02-15-2015 22	171	0	1680.8	0.4410	741.2	2.0312	3414.0	172.5	1.00	66.96	0.1255	210.9404	0.028125	3.3068	0.005558	80.35697	10.04462
	02-15-2015 23	171	0	1668.0	0.4520	753.9	2.0458	3412.4	171.1	1.00	66.45	0.1255	209.334	0.027911	3.3068	0.005516	79.74502	9.968127
	02-16-2015 00	126	0	1241.0	0.4760	590.7	2.0091	2493.3	127.3	1.00	49.44	0.1255	155.7455	0.020766	3.3068	0.004104	59.33068	7.416335
	02-16-2015 01	98	0	986.3	0.4300	424.1	1.9877	1960.5	101.2	1.00	39.29	0.1255	123.7807	0.016504	3.3068	0.003261	47.15378	5.894223
	02-16-2015 02	138	0	1409.7	0.4110	579.4	2.0218	2850.1	144.6	1.00	56.16	0.1255	176.9174	0.023589	3.3068	0.004662	67.39602	8.424502
	02-16-2015 03	171	0	1705.1	0.4510	769.0	2.0388	3476.4	174.9	1.00	67.93	0.1255	213.9901	0.028532	3.3068	0.005638	81.51873	10.18984
	02-16-2015 04	170	0	1675.1	0.4620	773.9	2.0530	3439.0	171.9	1.00	66.74	0.1255	210.2251	0.02803	3.3068	0.005539	80.08446	10.01056
	02-16-2015 05	157	0	1562.2	0.4390	685.8	2.0319	3174.2	160.3	1.00	62.24	0.1255	196.0561	0.02614	3.3068	0.005166	74.68685	9.335857
	02-16-2015 06	165	0	1637.8	0.4470	732.1	2.0480	3354.2	168.0	1.00	65.25	0.1255	205.5439	0.027405	3.3068	0.005416	78.3012	9.787649
	02-16-2015 07	170	0	1684.2	0.4520	761.3	2.0395	3434.9	172.8	1.00	67.10	0.1255	211.3671	0.028182	3.3068	0.005569	80.51952	10.06494
	02-16-2015 08	167	0	1650.6	0.4500	742.8	2.0493	3382.6	169.4	1.00	65.76	0.1255	207.1503	0.02762	3.3068	0.005458	78.91315	9.864143
	02-16-2015 09	170	0	1673.0	0.4430	741.1	2.0550	3438.0	171.6	1.00	66.65	0.1255	209.9615	0.027994	3.3068	0.005532	79.98406	9.998008
	02-16-2015 10	170	0	1666.6	0.4450	741.6	2.0421	3403.4	171.0	1.00	66.40	0.1255	209.1583	0.027887	3.3068	0.005511	79.67809	9.959761
	02-16-2015 11	170	0	1673.8	0.4360	729.8	2.0365	3408.7	171.7	1.00	66.69	0.1255	210.0619	0.028008	3.3068	0.005535	80.02231	10.00279
	02-16-2015 12	170	0	1673.8	0.4450	744.8	2.0418	3417.5	171.7	1.00	66.69	0.1255	210.0619	0.028008	3.3068	0.005535	80.02231	10.00279
	02-16-2015 13	170	0	1659.5	0.4500	746.8	2.0670	3430.2	170.3	1.00	66.12	0.1255	208.2673	0.027769	3.3068	0.005488	79.33865	9.917331
	02-16-2015 14	170	0	1657.5	0.4490	744.2	2.0650	3422.8	170.1	1.00	65.04	0.1255	208.0163	0.027735	3.3068	0.005481	79.24303	9.905378
	02-16-2015 15	170	0	1654.4	0.4480	741.2	2.0740	3431.2	169.7	1.00	65.91	0.1255	207.6272	0.027683	3.3068	0.005471	79.09482	9.886853
	02-16-2015 16	170	0	1665.0	0.4510	750.9	2.0689	3444.8	170.8	1.00	66.33	0.1255	208.9575	0.027861	3.3068	0.005506	79.60159	9.950199
	02-16-2015 17	169	0	1657.6	0.4520	749.2	2.0763	3441.6	170.1	1.00	66.04	0.1255	208.0288	0.027737	3.3068	0.005481	79.24781	9.905976
	02-16-2015 18	170	0	1663.3	0.4540	755.1	2.0667	3437.5	170.7	1.00	66.27	0.1255	208.7442	0.027832	3.3068	0.0055	79.52032	9.94004
	02-16-2015 19	170	0	1659.4	0.4530	751.7	2.0733	3440.5	170.3	1.00	66.11	0.1255	208.2547	0.027767	3.3068	0.005487	79.33386	9.916733
	02-16-2015 20	170	0	1658.8	0.4540	753.1	2.0699	3433.6	170.2	1.00	66.09	0.1255	208.1794	0.027757	3.3068	0.005485	79.30518	9.913147
	02-16-2015 21	170	0	1658.2	0.4540	752.8	2.0637	3422.0	170.1	1.00	66.06	0.1255	208.1041	0.027747	3.3068	0.005483	79.27649	9.909562
	02-16-2015 22	170	0	1660.6	0.4550	755.6	2.0626	3425.2	170.4	1.00	66.16	0.1255	208.4053	0.027787	3.3068	0.005491	79.39124	9.923904
	02-16-2015 23	170	0	1655.5	0.4560	754.9	2.0634	3415.9	169.9	1.00	65.96	0.1255	207.7653	0.027702	3.3068	0.005474	79.14741	9.893426

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-17-2015 00	130	0	1282.2	0.4800	615.5	2.0399	2615.6	131.6	1.00	51.08	0.1255	160.9161	0.021455	3.3068	0.00424	61.3004	7.66255
	02-17-2015 01	106	0	1067.3	0.4660	497.4	2.0541	2192.3	109.5	1.00	42.52	0.1255	133.9462	0.017859	3.3068	0.003529	51.02629	6.378287
	02-17-2015 02	141	0	1436.9	0.4000	574.8	2.0756	2982.4	147.4	1.00	57.25	0.1255	180.331	0.024044	3.3068	0.004752	68.69641	8.587052
	02-17-2015 03	170	0	1676.7	0.4490	752.8	2.0545	3444.8	172.0	1.00	66.80	0.1255	210.4259	0.028056	3.3068	0.005544	80.16096	10.02012
	02-17-2015 04	170	0	1662.7	0.4480	744.9	2.0618	3428.1	170.6	1.00	66.24	0.1255	208.6689	0.027822	3.3068	0.005498	79.49163	9.936454
	02-17-2015 05	170	0	1650.2	0.4540	749.2	2.0398	3366.0	169.3	1.00	65.75	0.1255	207.1001	0.027613	3.3068	0.005457	78.89402	9.861753
	02-17-2015 06	170	0	1658.7	0.4660	773.0	2.0438	3390.0	170.2	1.00	66.08	0.1255	208.1669	0.027755	3.3068	0.005485	79.3004	9.91255
	02-17-2015 07	170	0	1655.4	0.4620	764.8	2.0491	3392.0	169.8	1.00	65.95	0.1255	207.7527	0.0277	3.3068	0.005474	79.14263	9.892829
	02-17-2015 08	170	0	1674.6	0.4600	770.3	2.0394	3415.2	171.8	1.00	66.72	0.1255	210.1623	0.028021	3.3068	0.005538	80.06056	10.00757
	02-17-2015 09	170	0	1650.5	0.4640	765.8	2.0454	3377.6	169.3	1.00	65.76	0.1255	207.1378	0.027618	3.3068	0.005458	78.90837	9.863546
	02-17-2015 10	170	0	1650.1	0.4630	764.0	2.0355	3358.8	169.3	1.00	65.74	0.1255	207.0876	0.027611	3.3068	0.005457	78.88924	9.861155
	02-17-2015 11	169	0	1658.8	0.4540	753.1	2.0148	3342.2	170.2	1.00	66.09	0.1255	208.1794	0.027757	3.3068	0.005485	79.30518	9.913147
	02-17-2015 12	170	0	1673.9	0.4660	780.0	2.0105	3365.4	171.7	1.00	66.69	0.1255	210.0745	0.028009	3.3068	0.005535	80.02709	10.00339
	02-17-2015 13	170	0	1673.0	0.4800	803.0	1.9989	3344.2	171.7	1.00	66.65	0.1255	209.9615	0.027994	3.3068	0.005532	79.98406	9.998008
	02-17-2015 14	170	0	1666.4	0.4670	778.2	1.9906	3317.2	171.0	1.00	66.39	0.1255	209.1332	0.027884	3.3068	0.00551	79.66853	9.958566
	02-17-2015 15	170	0	1661.8	0.4740	787.7	2.0006	3324.6	170.5	1.00	66.21	0.1255	208.5559	0.027807	3.3068	0.005495	79.44861	9.931076
	02-17-2015 16	170	0	1664.5	0.4740	789.0	1.9976	3325.0	170.8	1.00	66.31	0.1255	208.8948	0.027852	3.3068	0.005504	79.57769	9.947211
	02-17-2015 17	170	0	1663.7	0.4670	776.9	2.0033	3332.9	170.7	1.00	66.28	0.1255	208.7944	0.027839	3.3068	0.005501	79.53944	9.94243
	02-17-2015 18	170	0	1669.0	0.4640	774.4	2.0049	3346.2	171.2	1.00	66.49	0.1255	209.4595	0.027927	3.3068	0.005519	79.79283	9.974104
	02-17-2015 19	170	0	1669.2	0.4640	774.5	2.0168	3366.5	171.3	1.00	66.50	0.1255	209.4846	0.027931	3.3068	0.00552	79.80239	9.975299
	02-17-2015 20	170	0	1672.7	0.4650	777.8	2.0238	3385.2	171.6	1.00	66.64	0.1255	209.9239	0.027989	3.3068	0.005531	79.96972	9.996215
	02-17-2015 21	170	0	1671.4	0.4630	773.9	2.0382	3406.6	171.5	1.00	66.59	0.1255	209.7607	0.027968	3.3068	0.005527	79.90757	9.988446
	02-17-2015 22	167	0	1631.8	0.4670	762.1	2.0634	3367.1	167.4	1.00	65.01	0.1255	204.7909	0.027305	3.3068	0.005396	78.01434	9.751793
	02-17-2015 23	158	0	1525.9	0.4430	676.0	2.0352	3105.5	156.6	1.00	60.79	0.1255	191.5005	0.025533	3.3068	0.005046	72.95139	9.118924
	02-18-2015 00	129	0	1231.1	0.4330	533.1	1.9301	2376.1	126.3	1.00	49.05	0.1255	154.5031	0.0206	3.3068	0.004071	58.85737	7.357171
	02-18-2015 01	115	0	1091.4	0.4110	448.6	1.9613	2140.6	112.0	1.00	43.48	0.1255	136.9707	0.018262	3.3068	0.003609	52.17849	6.522311
	02-18-2015 02	115	0	1088.1	0.4020	437.4	1.9892	2164.4	111.6	1.00	43.35	0.1255	136.5566	0.018207	3.3068	0.003598	52.02072	6.50259
	02-18-2015 03	134	0	1260.4	0.3860	486.5	2.0194	2545.3	129.3	1.00	50.22	0.1255	158.1802	0.02109	3.3068	0.004168	60.25817	7.532271
	02-18-2015 04	165	0	1619.7	0.3990	646.3	1.9396	3141.5	166.2	1.00	64.53	0.1255	203.2724	0.027103	3.3068	0.005356	77.43586	9.679482
	02-18-2015 05	170	0	1678.8	0.4280	718.5	1.9023	3193.6	172.2	1.00	66.88	0.1255	210.6894	0.028091	3.3068	0.005551	80.26135	10.03267
	02-18-2015 06	170	0	1694.7	0.4270	723.6	1.9238	3260.3	173.9	1.00	67.52	0.1255	212.6849	0.028358	3.3068	0.005604	81.02151	10.12769
	02-18-2015 07	171	0	1682.0	0.4380	736.7	1.9508	3281.3	172.6	1.00	67.01	0.1255	211.091	0.028145	3.3068	0.005562	80.41434	10.05179
	02-18-2015 08	171	0	1672.0	0.4380	732.3	1.9572	3272.4	171.6	1.00	66.61	0.1255	209.836	0.027978	3.3068	0.005529	79.93625	9.992032
	02-18-2015 09	152	0	1568.5	0.4190	657.2	1.9259	3020.8	160.9	1.00	62.49	0.1255	196.8468	0.026246	3.3068	0.005187	74.98805	9.373506
	02-18-2015 10	149	0	1564.2	0.4140	647.6	1.9114	2989.8	160.5	1.00	62.32	0.1255	196.3071	0.026174	3.3068	0.005172	74.78247	9.347809
	02-18-2015 11	156	0	1620.6	0.4200	680.7	1.9220	3114.8	166.3	1.00	64.57	0.1255	203.3853	0.027118	3.3068	0.005359	77.47888	9.684861
	02-18-2015 12	151	0	1564.9	0.4200	657.3	1.9049	2981.0	160.6	1.00	62.35	0.1255	196.395	0.026186	3.3068	0.005175	74.81594	9.351992
	02-18-2015 13	85	0	1042.6	0.3320	345.1	1.7641	1839.3	107.0	1.00	41.54	0.1255	130.8463	0.017446	3.3068	0.003448	49.84542	6.230677
	02-18-2015 14	19	0	431.4	0.1231	53.1	1.2478	538.3	44.3	1.00	17.19	0.1255	54.1407	0.007219	3.3068	0.001427	20.6247	2.578088
	02-18-2015 15	0	0	145.4	0.0213	3.1	0.1045	15.2	14.9	1.00	5.79	0.1255	18.2477	0.002433	3.3068	0.000481	6.951394	0.868924
	02-18-2015 16	1	1	142.1	0.0197	2.8	0.0999	14.2	14.6	1.00	5.66	0.1255	17.83355	0.002378	3.3068	0.00047	6.793625	0.849203
	02-18-2015 17	0	0	141.2	0.0198	2.8	0.0949	13.4	14.5	1.00	5.63	0.1255	17.7206	0.002363	3.3068	0.000467	6.750598	0.843825
	02-18-2015 18	0	0	140.8	0.0199	2.8	0.0895	12.6	14.4	1.00	5.61	0.1255	17.6704	0.002356	3.3068	0.000466	6.731474	0.841434
	02-18-2015 19	0	0	117.3	0.0196	2.3	0.1074	12.6	12.0	1.00	4.67	0.1255	14.72115	0.001963	3.3068	0.000388	5.607968	0.700996
	02-18-2015 20	0	0	140.7	0.0192	2.7	0.0896	12.6	14.4	1.00	5.61	0.1255	17.65785	0.002354	3.3068	0.000465	6.726693	0.840837
	02-18-2015 21	0	0	140.9	0.0192	2.7	0.0894	12.6	14.5	1.00	5.61	0.1255	17.68295	0.002358	3.3068	0.000466	6.736255	0.842032
	02-18-2015 22	0	0	53.3	0.0193	1.0	0.0899	4.8	5.5	0.38	2.12	0.1255	6.686138	0.000891	3.3068	0.000176	2.54706	0.318382

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-18-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-19-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-20-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-20-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	02-21-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
TRUE	02-22-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.30	0.01	0.1255	0.03765	5.02E-06	3.3068	9.92E-07	0.014343	0.001793
	02-22-2015 01	0	0	62.6	0.0160	1.0	0.0000	0.0	6.4	1.00	2.49	0.1255	7.8563	0.001047	3.3068	0.000207	2.992829	0.374104
	02-22-2015 02	0	0	88.2	0.0317	2.8	0.0000	0.0	9.1	1.00	3.51	0.1255	11.0691	0.001476	3.3068	0.000292	4.216733	0.527092
	02-22-2015 03	0	0	100.7	0.0417	4.2	0.0000	0.0	10.3	1.00	4.01	0.1255	12.63785	0.001685	3.3068	0.000333	4.814343	0.601793
	02-22-2015 04	0	0	92.7	0.0410	3.8	0.0453	4.2	9.5	1.00	3.69	0.1255	11.63385	0.001551	3.3068	0.000307	4.431873	0.553984
	02-22-2015 05	0	0	96.9	0.0392	3.8	0.0041	0.4	9.9	1.00	3.86	0.1255	12.16095	0.001621	3.3068	0.00032	4.632669	0.579084
	02-22-2015 06	0	0	94.2	0.0403	3.8	0.0000	0.0	9.7	1.00	3.75	0.1255	11.8221	0.001576	3.3068	0.000311	4.503586	0.562948
	02-22-2015 07	0	0	93.0	0.0409	3.8	0.0000	0.0	9.5	1.00	3.71	0.1255	11.6715	0.001556	3.3068	0.000308	4.446215	0.555777
	02-22-2015 08	0	0	92.2	0.0401	3.7	0.0000	0.0	9.5	1.00	3.67	0.1255	11.5711	0.001543	3.3068	0.000305	4.407968	0.550996
	02-22-2015 09	0	0	92.5	0.0389	3.6	0.0000	0.0	9.5	1.00	3.69	0.1255	11.60875	0.001548	3.3068	0.000306	4.422311	0.552789
	02-22-2015 10	0	0	92.4	0.0390	3.6	0.0000	0.0	9.5	1.00	3.68	0.1255	11.5962	0.001546	3.3068	0.000306	4.41753	0.552191
	02-22-2015 11	0	0	128.3	0.0811	10.4	0.2362	30.3	13.2	1.00	5.11	0.1255	16.10165	0.002147	3.3068	0.000424	6.133865	0.766733
	02-22-2015 12	62	0	652.8	0.3090	201.7	1.6451	1073.9	67.0	1.00	26.01	0.1255	81.9264	0.010923	3.3068	0.002159	31.20956	3.901195
	02-22-2015 13	100	0	1031.9	0.3230	333.3	2.0369	2101.9	105.9	1.00	41.11	0.1255	129.5035	0.017267	3.3068	0.003412	49.33386	6.166733
	02-22-2015 14	105	0	1050.7	0.4050	425.5	2.0657	2170.4	107.8	1.00	41.86	0.1255	131.8629	0.017581	3.3068	0.003474	50.23267	6.279084
	02-22-2015 15	102	0	1017.6	0.3680	374.5	2.0545	2090.7	104.4	1.00	40.54	0.1255	127.7088	0.017028	3.3068	0.003365	48.6502	6.081275
	02-22-2015 16	137	0	1368.9	0.3970	543.5	2.0855	2854.8	140.5	1.00	54.54	0.1255	171.797	0.022906	3.3068	0.004527	65.44542	8.180677
	02-22-2015 17	155	0	1528.5	0.4570	698.5	2.0610	3150.3	156.8	1.00	60.90	0.1255	191.8268	0.025576	3.3068	0.005054	73.0757	9.134462
	02-22-2015 18	170	0	1624.9	0.4740	770.2	2.0979	3408.8	166.7	1.00	64.74	0.1255	203.925	0.02719	3.3068	0.005373	77.68446	9.710558
	02-22-2015 19	170	0	1628.2	0.4760	775.0	2.1109	3436.9	167.0	1.00	64.87	0.1255	204.3391	0.027245	3.3068	0.005384	77.84223	9.730279
	02-22-2015 20	170	0	1628.8	0.4780	778.6	2.1299	3469.1	167.1	1.00	64.89	0.1255	204.4144	0.027255	3.3068	0.005386	77.87092	9.733865

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-22-2015 21	166	0	1593.9	0.4750	757.1	2.1146	3370.4	163.5	1.00	63.50	0.1255	200.0345	0.026671	3.3068	0.005271	76.20239	9.525299
	02-22-2015 22	146	0	1405.7	0.4800	674.7	2.0992	2950.8	144.2	1.00	56.00	0.1255	176.4154	0.023522	3.3068	0.004648	67.20478	8.400598
	02-22-2015 23	125	0	1227.9	0.4780	586.9	2.0971	2575.0	126.0	1.00	48.92	0.1255	154.1015	0.020547	3.3068	0.00406	58.70438	7.338048
	02-23-2015 00	123	0	1211.9	0.4910	595.0	2.1153	2563.5	124.3	1.00	48.28	0.1255	152.0935	0.020279	3.3068	0.004007	57.93944	7.24243
	02-23-2015 01	112	0	1098.3	0.4670	512.9	2.1183	2326.5	112.7	1.00	43.76	0.1255	137.8367	0.018378	3.3068	0.003632	52.50837	6.563546
	02-23-2015 02	98	0	960.6	0.4510	433.2	2.1108	2027.6	98.6	1.00	38.27	0.1255	120.5553	0.016074	3.3068	0.003176	45.9251	5.740637
	02-23-2015 03	98	0	961.3	0.4280	411.4	2.1287	2046.3	98.6	1.00	38.30	0.1255	120.6432	0.016085	3.3068	0.003179	45.95857	5.744821
	02-23-2015 04	112	0	1092.0	0.4090	446.6	2.1368	2333.4	112.0	1.00	43.51	0.1255	137.046	0.018273	3.3068	0.003611	52.20717	6.525896
	02-23-2015 05	131	0	1299.2	0.4570	593.7	2.1339	2772.4	133.3	1.00	51.76	0.1255	163.0496	0.02174	3.3068	0.004296	62.11315	7.764143
	02-23-2015 06	156	0	1506.2	0.4460	671.8	2.1510	3239.8	154.5	1.00	60.01	0.1255	189.0281	0.025203	3.3068	0.004981	72.00956	9.001195
	02-23-2015 07	156	0	1513.0	0.4660	705.1	2.1443	3244.4	155.2	1.00	60.28	0.1255	189.8815	0.025317	3.3068	0.005003	72.33466	9.041833
	02-23-2015 08	164	0	1547.2	0.4740	733.4	2.1750	3365.2	158.7	1.00	61.64	0.1255	194.1736	0.025889	3.3068	0.005116	73.96972	9.246215
	02-23-2015 09	163	0	1541.3	0.4810	741.4	2.1691	3343.2	158.1	1.00	61.41	0.1255	193.4332	0.025791	3.3068	0.005097	73.68765	9.210956
	02-23-2015 10	153	0	1467.5	0.4870	714.7	2.1700	3184.5	150.6	1.00	58.47	0.1255	184.1713	0.024556	3.3068	0.004853	70.15936	8.76992
	02-23-2015 11	161	0	1532.4	0.4810	737.1	2.1805	3341.4	157.2	1.00	61.05	0.1255	192.3162	0.025642	3.3068	0.005067	73.26215	9.157769
	02-23-2015 12	163	0	1552.6	0.4790	743.7	2.1631	3358.4	159.3	1.00	61.86	0.1255	194.8513	0.02598	3.3068	0.005134	74.22789	9.278486
	02-23-2015 13	163	0	1559.4	0.4820	751.6	2.1441	3343.5	160.0	1.00	62.13	0.1255	195.7047	0.026094	3.3068	0.005157	74.55299	9.319124
	02-23-2015 14	160	0	1531.2	0.4790	733.4	2.1337	3267.1	157.1	1.00	61.00	0.1255	192.1656	0.025622	3.3068	0.005063	73.20478	9.150598
	02-23-2015 15	157	0	1518.9	0.4760	723.0	2.1022	3193.1	155.8	1.00	60.51	0.1255	190.622	0.025416	3.3068	0.005023	72.61673	9.077092
	02-23-2015 16	162	0	1543.7	0.4640	716.3	2.0960	3235.6	158.4	1.00	61.50	0.1255	193.7344	0.025831	3.3068	0.005105	73.80239	9.225299
	02-23-2015 17	163	0	1557.3	0.4660	725.7	2.0938	3260.7	159.8	1.00	62.04	0.1255	195.4412	0.026058	3.3068	0.00515	74.45259	9.306574
	02-23-2015 18	164	0	1559.9	0.4630	722.2	2.0886	3258.0	160.0	1.00	62.15	0.1255	195.7675	0.026102	3.3068	0.005158	74.57689	9.322112
	02-23-2015 19	167	0	1613.9	0.4630	747.2	2.1034	3394.6	165.6	1.00	64.30	0.1255	202.5445	0.027005	3.3068	0.005337	77.15857	9.644821
	02-23-2015 20	164	0	1553.5	0.4400	683.5	2.1160	3287.2	159.4	1.00	61.89	0.1255	194.9643	0.025995	3.3068	0.005137	74.27092	9.283865
	02-23-2015 21	163	0	1554.3	0.4340	674.6	2.0990	3262.5	159.5	1.00	61.92	0.1255	195.0647	0.026008	3.3068	0.00514	74.30916	9.288645
	02-23-2015 22	164	0	1562.8	0.4310	673.6	2.1023	3285.4	160.3	1.00	62.26	0.1255	196.1314	0.02615	3.3068	0.005168	74.71554	9.339442
	02-23-2015 23	167	0	1594.9	0.4370	697.0	2.0822	3320.9	163.6	1.00	63.54	0.1255	200.16	0.026688	3.3068	0.005274	76.2502	9.531275
	02-24-2015 00	167	0	1593.2	0.4410	702.6	2.0869	3324.8	163.5	1.00	63.47	0.1255	199.9466	0.026659	3.3068	0.005268	76.16892	9.521116
	02-24-2015 01	167	0	1590.5	0.4370	695.0	2.0974	3335.9	163.2	1.00	63.37	0.1255	199.6078	0.026614	3.3068	0.005259	76.03984	9.50498
	02-24-2015 02	167	0	1592.1	0.4400	700.5	2.1029	3348.0	163.3	1.00	63.43	0.1255	199.8086	0.026641	3.3068	0.005265	76.11633	9.514542
	02-24-2015 03	167	0	1593.8	0.4450	709.2	2.0978	3343.5	163.5	1.00	63.50	0.1255	200.0219	0.026669	3.3068	0.00527	76.19761	9.524701
	02-24-2015 04	167	0	1598.4	0.4460	712.9	2.1094	3371.7	164.0	1.00	63.68	0.1255	200.5992	0.026746	3.3068	0.005286	76.41753	9.552191
	02-24-2015 05	169	0	1625.1	0.4520	734.5	2.0923	3400.2	166.7	1.00	64.75	0.1255	203.9501	0.027193	3.3068	0.005374	77.69402	9.711753
	02-24-2015 06	169	0	1632.3	0.4590	749.2	2.1084	3441.5	167.5	1.00	65.03	0.1255	204.8537	0.027313	3.3068	0.005398	78.03825	9.754781
	02-24-2015 07	166	0	1600.6	0.4520	723.5	2.1084	3374.7	164.2	1.00	63.77	0.1255	200.8753	0.026783	3.3068	0.005293	76.52271	9.565339
	02-24-2015 08	169	0	1645.5	0.4670	768.4	2.1065	3466.2	168.8	1.00	65.56	0.1255	206.5103	0.027534	3.3068	0.005441	78.66932	9.833665
	02-24-2015 09	170	0	1643.4	0.4730	777.3	2.1186	3481.7	168.6	1.00	65.47	0.1255	206.2467	0.027499	3.3068	0.005434	78.56892	9.821116
	02-24-2015 10	165	0	1592.4	0.4450	708.6	2.1285	3389.4	163.4	1.00	63.44	0.1255	199.8462	0.026646	3.3068	0.005266	76.13068	9.516335
	02-24-2015 11	167	0	1589.4	0.4380	696.2	2.1426	3405.5	163.1	1.00	63.32	0.1255	199.4697	0.026596	3.3068	0.005256	75.98725	9.498406
	02-24-2015 12	169	0	1621.0	0.4370	708.4	2.1399	3468.8	166.3	1.00	64.58	0.1255	203.4355	0.027124	3.3068	0.00536	77.49801	9.687251
	02-24-2015 13	170	0	1617.0	0.4400	711.5	2.1407	3461.5	165.9	1.00	64.42	0.1255	202.9335	0.027057	3.3068	0.005347	77.30677	9.663347
	02-24-2015 14	169	0	1625.9	0.4360	708.9	2.1503	3496.1	166.8	1.00	64.78	0.1255	204.0505	0.027206	3.3068	0.005376	77.73227	9.716534
	02-24-2015 15	169	0	1622.1	0.4390	712.1	2.1397	3470.8	166.4	1.00	64.63	0.1255	203.5736	0.027143	3.3068	0.005364	77.5506	9.693825
	02-24-2015 16	170	0	1642.5	0.4480	735.8	2.1663	3558.1	168.5	1.00	65.44	0.1255	206.1338	0.027484	3.3068	0.005431	78.5259	9.815737
	02-24-2015 17	169	0	1648.5	0.4520	745.1	2.1581	3557.6	169.1	1.00	65.68	0.1255	206.8868	0.027584	3.3068	0.005451	78.81275	9.851594
	02-24-2015 18	171	0	1654.1	0.4380	724.5	2.1648	3580.8	169.7	1.00	65.90	0.1255	207.5896	0.027678	3.3068	0.00547	79.08048	9.88506
	02-24-2015 19	170	0	1656.9	0.4600	762.2	2.1734	3601.1	170.0	1.00	66.01	0.1255	207.941	0.027725	3.3068	0.005479	79.21434	9.901793

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Substituted Data	Date/Hour	YF01 Gross Load MW Value	YF02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-24-2015 20	170	0	1648.8	0.4610	760.1	2.1787	3592.3	169.2	1.00	65.69	0.1255	206.9244	0.027589	3.3068	0.005452	78.82709	9.853386
	02-24-2015 21	169	0	1663.7	0.4520	752.0	2.1681	3607.0	170.7	1.00	66.28	0.1255	208.7944	0.027839	3.3068	0.005501	79.53944	9.94243
	02-24-2015 22	170	0	1632.1	0.4580	747.5	2.1667	3536.3	167.5	1.00	65.02	0.1255	204.8286	0.02731	3.3068	0.005397	78.02869	9.753586
	02-24-2015 23	168	0	1613.8	0.4500	726.2	2.1206	3422.3	165.6	1.00	64.29	0.1255	202.5319	0.027004	3.3068	0.005336	77.15378	9.644223
	02-25-2015 00	116	0	1106.4	0.5060	559.8	2.0502	2268.3	113.5	1.00	44.08	0.1255	138.8532	0.018513	3.3068	0.003659	52.89562	6.611952
	02-25-2015 01	114	0	1075.6	0.4660	501.2	2.0502	2205.2	110.4	1.00	42.85	0.1255	134.9878	0.017998	3.3068	0.003557	51.42311	6.427888
	02-25-2015 02	146	0	1384.8	0.4310	596.8	2.0333	2815.7	142.1	1.00	55.17	0.1255	173.7924	0.023172	3.3068	0.004579	66.20558	8.275697
	02-25-2015 03	170	0	1598.4	0.4540	725.7	2.0162	3222.7	164.0	1.00	63.68	0.1255	200.5992	0.026746	3.3068	0.005286	76.41753	9.552191
	02-25-2015 04	170	0	1591.6	0.4520	719.4	2.0172	3210.5	163.3	1.00	63.41	0.1255	199.7458	0.026632	3.3068	0.005263	76.09243	9.511554
	02-25-2015 05	168	0	1661.8	0.4220	701.3	1.9185	3188.1	170.5	1.00	66.21	0.1255	208.5559	0.027807	3.3068	0.005495	79.44861	9.931076
	02-25-2015 06	169	0	1664.7	0.4320	719.2	1.9334	3218.5	170.8	1.00	66.32	0.1255	208.9199	0.027856	3.3068	0.005505	79.58725	9.948406
	02-25-2015 07	169	0	1661.8	0.4330	719.6	1.9356	3216.5	170.5	1.00	66.21	0.1255	208.5559	0.027807	3.3068	0.005495	79.44861	9.931076
	02-25-2015 08	170	0	1619.8	0.4390	711.1	1.9939	3229.8	166.2	1.00	64.53	0.1255	203.2849	0.027104	3.3068	0.005356	77.44064	9.68008
	02-25-2015 09	170	0	1654.4	0.4300	711.4	1.9313	3195.1	169.7	1.00	65.91	0.1255	207.6272	0.027683	3.3068	0.005471	79.09482	9.886853
	02-25-2015 10	169	0	1630.6	0.4200	684.9	1.9252	3139.2	167.3	1.00	64.96	0.1255	204.6403	0.027285	3.3068	0.005392	77.95697	9.744622
	02-25-2015 11	171	0	1639.5	0.4260	698.4	1.9088	3129.5	168.2	1.00	65.32	0.1255	205.7573	0.027434	3.3068	0.005421	78.38247	9.797809
	02-25-2015 12	170	0	1651.8	0.4210	695.4	1.8961	3132.0	169.5	1.00	65.81	0.1255	207.3009	0.02764	3.3068	0.005462	78.97052	9.871315
	02-25-2015 13	171	0	1646.4	0.4190	689.8	1.8904	3112.3	168.9	1.00	65.59	0.1255	206.6232	0.027549	3.3068	0.005444	78.71235	9.839044
	02-25-2015 14	169	0	1630.3	0.4180	681.5	1.8843	3071.9	167.3	1.00	64.95	0.1255	204.6027	0.02728	3.3068	0.005391	77.94263	9.742829
	02-25-2015 15	155	0	1504.4	0.4200	631.8	1.8788	2826.5	154.4	1.00	59.94	0.1255	188.8022	0.025173	3.3068	0.004975	71.92351	8.990438
	02-25-2015 16	160	0	1573.9	0.4060	639.0	1.8517	2914.4	161.5	1.00	62.71	0.1255	197.5245	0.026336	3.3068	0.005205	75.24622	9.405777
	02-25-2015 17	165	0	1606.1	0.4060	652.1	1.8917	3038.2	164.8	1.00	63.99	0.1255	201.5656	0.026875	3.3068	0.005311	76.78566	9.598207
	02-25-2015 18	165	0	1600.8	0.4240	678.7	1.8936	3031.2	164.2	1.00	63.78	0.1255	200.9004	0.026786	3.3068	0.005293	76.53227	9.566534
	02-25-2015 19	166	6	1715.6	0.4300	737.7	1.9003	3260.1	176.0	1.00	68.35	0.1255	215.3078	0.028707	3.3068	0.005673	82.02072	10.25259
	02-25-2015 20	169	28	1944.4	0.4840	941.1	1.9631	3817.1	199.5	1.00	77.47	0.1255	244.0222	0.032536	3.3068	0.00643	92.95936	11.61992
	02-25-2015 21	171	77	2328.4	0.4130	961.6	2.0263	4718.1	238.9	1.00	92.76	0.1255	292.2142	0.038961	3.3068	0.007699	111.3179	13.91474
	02-25-2015 22	171	84	2426.3	0.4760	1154.9	2.1013	5098.5	248.9	1.00	96.67	0.1255	304.5007	0.040599	3.3068	0.008023	115.9984	14.4998
	02-25-2015 23	171	85	2408.1	0.4670	1124.6	2.1365	5145.1	247.1	1.00	95.94	0.1255	302.2166	0.040295	3.3068	0.007963	115.1283	14.39104
	02-26-2015 00	127	86	1974.3	0.5360	1058.2	2.1184	4182.4	202.6	1.00	78.66	0.1255	247.7747	0.033036	3.3068	0.006529	94.38884	11.79861
	02-26-2015 01	98	86	1731.4	0.5650	978.2	2.0999	3635.8	177.6	1.00	68.98	0.1255	217.2907	0.028972	3.3068	0.005725	82.7761	10.34701
	02-26-2015 02	135	86	2074.7	0.5030	1043.6	2.1150	4388.0	212.9	1.00	82.66	0.1255	260.3749	0.034716	3.3068	0.006861	99.18884	12.39861
	02-26-2015 03	160	86	2272.2	0.4950	1124.7	2.1157	4807.4	233.1	1.00	90.53	0.1255	285.1611	0.038021	3.3068	0.007514	108.6311	13.57888
	02-26-2015 04	154	86	2222.5	0.5010	1113.5	2.1150	4700.5	228.0	1.00	88.55	0.1255	278.9238	0.037189	3.3068	0.007349	106.255	13.28187
	02-26-2015 05	151	86	2200.9	0.4910	1080.6	2.1049	4632.7	225.8	1.00	87.69	0.1255	276.213	0.036828	3.3068	0.007278	105.2223	13.15279
	02-26-2015 06	166	87	2337.2	0.4870	1138.2	2.1041	4917.8	239.8	1.00	93.12	0.1255	293.3186	0.039109	3.3068	0.007729	111.7386	13.96733
	02-26-2015 07	163	87	2303.2	0.4870	1121.7	2.0981	4832.3	236.3	1.00	91.76	0.1255	289.0516	0.03854	3.3068	0.007616	110.1131	13.76414
	02-26-2015 08	163	87	2301.2	0.4520	1040.1	2.1046	4843.2	236.1	1.00	91.68	0.1255	288.8006	0.038506	3.3068	0.00761	110.0175	13.75219
	02-26-2015 09	166	84	2333.9	0.4380	1022.2	2.0935	4886.0	239.5	1.00	92.98	0.1255	292.9045	0.039053	3.3068	0.007718	111.5809	13.94761
	02-26-2015 10	169	82	2360.5	0.4420	1043.3	2.0960	4947.7	242.2	1.00	94.04	0.1255	296.2428	0.039498	3.3068	0.007806	112.8526	14.10657
	02-26-2015 11	171	86	2394.9	0.4690	1123.2	2.1094	5051.8	245.7	1.00	95.41	0.1255	300.56	0.040074	3.3068	0.007919	114.4972	14.31215
	02-26-2015 12	169	87	2362.3	0.4860	1148.1	2.1057	4974.4	242.4	1.00	94.12	0.1255	296.4687	0.039529	3.3068	0.007812	112.9386	14.11733
	02-26-2015 13	169	88	2360.4	0.4670	1102.3	2.0977	4951.4	242.2	1.00	94.04	0.1255	296.2302	0.039497	3.3068	0.007805	112.8478	14.10598
	02-26-2015 14	169	87	2373.9	0.4870	1156.1	2.0880	4956.8	243.6	1.00	94.58	0.1255	297.9245	0.039723	3.3068	0.00785	113.4932	14.18665
	02-26-2015 15	169	87	2342.8	0.5010	1173.7	2.0696	4848.6	240.4	1.00	93.34	0.1255	294.0214	0.039202	3.3068	0.007747	112.0064	14.0008
	02-26-2015 16	169	88	2350.7	0.4890	1149.5	2.0774	4883.4	241.2	1.00	93.65	0.1255	295.0129	0.039334	3.3068	0.007773	112.3841	14.04801
	02-26-2015 17	169	88	2346.8	0.5000	1173.4	2.0884	4901.0	240.8	1.00	93.50	0.1255	294.5234	0.039269	3.3068	0.00776	112.1976	14.0247
	02-26-2015 18	166	88	2333.6	0.5040	1176.1	2.0678	4825.4	239.4	1.00	92.97	0.1255	292.8668	0.039048	3.3068	0.007717	111.5665	13.94582

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-26-2015 19	166	88	2330.0	0.5020	1169.7	2.0623	4805.2	239.1	1.00	92.83	0.1255	292.415	0.038988	3.3068	0.007705	111.3944	13.9243
	02-26-2015 20	167	88	2327.6	0.5020	1168.5	2.0704	4819.1	238.8	1.00	92.73	0.1255	292.1138	0.038948	3.3068	0.007697	111.2797	13.90996
	02-26-2015 21	167	88	2331.5	0.5030	1172.7	2.0797	4848.9	239.2	1.00	92.89	0.1255	292.6033	0.039013	3.3068	0.00771	111.4661	13.93327
	02-26-2015 22	166	88	2334.1	0.4970	1160.0	2.0778	4849.9	239.5	1.00	92.99	0.1255	292.9296	0.039057	3.3068	0.007718	111.5904	13.9488
	02-26-2015 23	154	88	2207.0	0.5080	1121.2	2.0867	4605.4	226.4	1.00	87.93	0.1255	276.9785	0.03693	3.3068	0.007298	105.5139	13.18924
	02-27-2015 00	147	88	2159.2	0.5160	1114.1	2.0754	4481.1	221.5	1.00	86.02	0.1255	270.9796	0.03613	3.3068	0.00714	103.2287	12.90359
	02-27-2015 01	146	88	2141.1	0.5120	1096.2	2.0819	4457.5	219.7	1.00	85.30	0.1255	268.7081	0.035827	3.3068	0.00708	102.3633	12.79542
	02-27-2015 02	162	88	2300.0	0.4970	1143.1	2.0855	4796.6	236.0	1.00	91.63	0.1255	288.65	0.038486	3.3068	0.007606	109.9602	13.74502
	02-27-2015 03	166	88	2340.4	0.4970	1163.2	2.0878	4886.2	240.1	1.00	93.24	0.1255	293.7202	0.039162	3.3068	0.007739	111.8916	13.98645
	02-27-2015 04	163	88	2294.8	0.5080	1165.8	2.0890	4793.8	235.4	1.00	91.43	0.1255	287.9974	0.038399	3.3068	0.007588	109.7116	13.71394
	02-27-2015 05	165	87	2281.2	0.5120	1168.0	2.1048	4801.4	234.1	1.00	90.88	0.1255	286.2906	0.038171	3.3068	0.007543	109.0614	13.63267
	02-27-2015 06	168	88	2347.1	0.5070	1190.0	2.0991	4926.8	240.8	1.00	93.51	0.1255	294.5611	0.039274	3.3068	0.007761	112.212	14.02649
	02-27-2015 07	169	88	2341.6	0.5100	1194.2	2.1046	4928.1	240.2	1.00	93.29	0.1255	293.8708	0.039182	3.3068	0.007743	111.949	13.99363
	02-27-2015 08	168	88	2343.0	0.5090	1192.6	2.1001	4920.5	240.4	1.00	93.35	0.1255	294.0465	0.039206	3.3068	0.007748	112.0159	14.00199
	02-27-2015 09	168	88	2357.6	0.5010	1181.2	2.0986	4947.7	241.9	1.00	93.93	0.1255	295.8788	0.03945	3.3068	0.007796	112.7139	14.08924
	02-27-2015 10	168	88	2328.9	0.5050	1176.1	2.1228	4943.7	238.9	1.00	92.78	0.1255	292.277	0.03897	3.3068	0.007701	111.3418	13.91773
	02-27-2015 11	165	88	2300.5	0.5060	1164.1	2.1263	4891.6	236.0	1.00	91.65	0.1255	288.7128	0.038494	3.3068	0.007607	109.9841	13.74801
	02-27-2015 12	155	88	2211.4	0.5150	1138.9	2.1189	4685.7	226.9	1.00	88.10	0.1255	277.5307	0.037004	3.3068	0.007313	105.7243	13.21554
	02-27-2015 13	161	88	2250.8	0.4960	1116.4	2.1315	4797.5	230.9	1.00	89.67	0.1255	282.4754	0.037663	3.3068	0.007443	107.608	13.451
	02-27-2015 14	152	88	2193.2	0.4980	1092.2	2.1122	4632.4	225.0	1.00	87.38	0.1255	275.2466	0.036699	3.3068	0.007252	104.8542	13.10677
	02-27-2015 15	153	88	2200.3	0.4900	1078.1	2.1163	4656.6	225.8	1.00	87.66	0.1255	276.1377	0.036818	3.3068	0.007276	105.1936	13.1492
	02-27-2015 16	155	88	2203.3	0.4980	1097.2	2.1264	4685.1	226.1	1.00	87.78	0.1255	276.5142	0.036868	3.3068	0.007286	105.3371	13.16713
	02-27-2015 17	158	88	2253.0	0.4840	1090.5	2.1179	4771.7	231.2	1.00	89.76	0.1255	282.7515	0.0377	3.3068	0.00745	107.7131	13.46414
	02-27-2015 18	166	88	2300.4	0.4620	1062.8	2.1276	4894.3	236.0	1.00	91.65	0.1255	288.7002	0.038493	3.3068	0.007607	109.9793	13.74741
	02-27-2015 19	168	87	2319.9	0.4460	1034.7	2.1281	4937.0	238.0	1.00	92.43	0.1255	291.1475	0.038819	3.3068	0.007671	110.9116	13.86394
	02-27-2015 20	169	87	2344.9	0.4660	1092.7	2.1032	4931.8	240.6	1.00	93.42	0.1255	294.285	0.039237	3.3068	0.007754	112.1068	14.01335
	02-27-2015 21	169	88	2348.1	0.4930	1157.6	2.0976	4925.3	240.9	1.00	93.55	0.1255	294.6866	0.039291	3.3068	0.007765	112.2598	14.03247
	02-27-2015 22	167	86	2331.5	0.4930	1149.4	2.0985	4892.7	239.2	1.00	92.89	0.1255	292.6033	0.039013	3.3068	0.00771	111.4661	13.93327
	02-27-2015 23	169	86	2311.3	0.5030	1162.6	2.1231	4907.1	237.1	1.00	92.08	0.1255	290.0682	0.038675	3.3068	0.007643	110.5004	13.81255
	02-28-2015 00	115	87	1872.7	0.5880	1101.1	2.0916	3916.9	192.1	1.00	74.61	0.1255	235.0239	0.031336	3.3068	0.006193	89.53147	11.19143
	02-28-2015 01	99	88	1736.5	0.6070	1054.1	2.0798	3611.5	178.2	1.00	69.18	0.1255	217.9308	0.029057	3.3068	0.005742	83.01992	10.37749
	02-28-2015 02	114	89	1892.6	0.5810	1099.6	2.0630	3904.5	194.2	1.00	75.40	0.1255	237.5213	0.031669	3.3068	0.006258	90.48287	11.31036
	02-28-2015 03	147	91	2187.1	0.5210	1139.5	2.0742	4536.5	224.4	1.00	87.14	0.1255	274.4811	0.036597	3.3068	0.007232	104.5625	13.07032
	02-28-2015 04	162	90	2302.1	0.5080	1169.5	2.0757	4778.4	236.2	1.00	91.72	0.1255	288.9136	0.038521	3.3068	0.007613	110.0606	13.75757
	02-28-2015 05	163	87	2259.5	0.5050	1141.0	2.0781	4695.5	231.8	1.00	90.02	0.1255	283.5673	0.037808	3.3068	0.007472	108.0239	13.50299
	02-28-2015 06	164	87	2289.1	0.4950	1133.1	2.0730	4745.3	234.9	1.00	91.20	0.1255	287.2821	0.038304	3.3068	0.00757	109.439	13.67988
	02-28-2015 07	170	87	2352.8	0.4960	1167.0	2.0589	4844.1	241.4	1.00	93.74	0.1255	295.2764	0.03937	3.3068	0.00778	112.4845	14.06056
	02-28-2015 08	170	87	2359.3	0.5030	1186.7	2.0479	4831.5	242.1	1.00	94.00	0.1255	296.0922	0.039478	3.3068	0.007802	112.7952	14.0994
	02-28-2015 09	170	88	2353.8	0.5010	1179.3	2.0537	4834.0	241.5	1.00	93.78	0.1255	295.4019	0.039386	3.3068	0.007783	112.5323	14.06653
	02-28-2015 10	170	87	2345.5	0.5050	1184.5	2.0479	4803.4	240.6	1.00	93.45	0.1255	294.3603	0.039247	3.3068	0.007756	112.1355	14.01693
	02-28-2015 11	170	87	2354.0	0.5000	1177.0	2.0248	4766.4	241.5	1.00	93.78	0.1255	295.427	0.03939	3.3068	0.007784	112.5418	14.06773
	02-28-2015 12	158	87	2238.1	0.5150	1152.6	2.0161	4512.3	229.6	1.00	89.17	0.1255	280.8816	0.03745	3.3068	0.007401	107.0008	13.3751
	02-28-2015 13	151	87	2171.8	0.5130	1114.1	2.0116	4368.8	222.8	1.00	86.53	0.1255	272.5609	0.036341	3.3068	0.007182	103.8311	12.97888
	02-28-2015 14	152	87	2183.7	0.4990	1089.7	2.0036	4375.3	224.1	1.00	87.00	0.1255	274.0544	0.03654	3.3068	0.007221	104.4	13.05
	02-28-2015 15	139	87	2092.8	0.5190	1086.2	1.9990	4183.6	214.7	1.00	83.38	0.1255	262.6464	0.035019	3.3068	0.00692	100.0542	12.50677
	02-28-2015 16	160	87	2256.0	0.5000	1128.0	2.0093	4533.0	231.5	1.00	89.88	0.1255	283.128	0.03775	3.3068	0.00746	107.8566	13.48207
	02-28-2015 17	153	87	2205.4	0.5010	1104.9	1.9901	4388.9	226.3	1.00	87.86	0.1255	276.7777	0.036903	3.3068	0.007293	105.4375	13.17968

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-28-2015 18	163	87	2272.3	0.5030	1143.0	1.9929	4528.4	233.1	1.00	90.53	0.1255	285.1737	0.038023	3.3068	0.007514	108.6359	13.57948
	02-28-2015 19	164	87	2286.9	0.5060	1157.2	1.9883	4547.1	234.6	1.00	91.11	0.1255	287.006	0.038267	3.3068	0.007562	109.3339	13.66673
	02-28-2015 20	164	86	2313.3	0.5080	1175.2	1.9786	4577.1	237.3	1.00	92.16	0.1255	290.3192	0.038709	3.3068	0.00765	110.596	13.8245
	02-28-2015 21	164	87	2321.3	0.5070	1176.9	1.9763	4587.6	238.2	1.00	92.48	0.1255	291.3232	0.038842	3.3068	0.007676	110.9785	13.87231
	02-28-2015 22	164	86	2312.3	0.5100	1179.3	1.9741	4564.6	237.2	1.00	92.12	0.1255	290.1937	0.038692	3.3068	0.007646	110.5482	13.81853
	02-28-2015 23	164	86	2303.3	0.5090	1172.4	1.9744	4547.6	236.3	1.00	91.76	0.1255	289.0642	0.038541	3.3068	0.007616	110.1179	13.76474
	03-01-2015 00	140	87	2105.0	0.5210	1096.7	1.9639	4134.0	216.0	1.00	83.86	0.1255	264.1775	0.035223	3.3068	0.006961	100.6375	12.57968
	03-01-2015 01	158	86	2270.4	0.5070	1151.1	1.9691	4470.7	232.9	1.00	90.45	0.1255	284.9352	0.037991	3.3068	0.007508	108.545	13.56813
	03-01-2015 02	157	87	2237.9	0.5140	1150.3	1.9721	4413.4	229.6	1.00	89.16	0.1255	280.8565	0.037447	3.3068	0.0074	106.9912	13.3739
	03-01-2015 03	159	87	2272.5	0.5180	1177.2	1.9619	4458.4	233.2	1.00	90.54	0.1255	285.1988	0.038026	3.3068	0.007515	108.6454	13.58068
	03-01-2015 04	144	87	2076.1	0.5350	1110.7	1.9642	4077.8	213.0	1.00	82.71	0.1255	260.5506	0.03474	3.3068	0.006865	99.25578	12.40697
	03-01-2015 05	159	86	2254.3	0.4920	1109.1	1.9844	4473.4	231.3	1.00	89.81	0.1255	282.9147	0.037721	3.3068	0.007454	107.7753	13.47191
	03-01-2015 06	161	87	2289.8	0.4870	1115.1	1.9643	4497.9	234.9	1.00	91.23	0.1255	289.3699	0.038315	3.3068	0.007572	109.4725	13.68406
	03-01-2015 07	160	87	2278.8	0.4970	1132.6	1.9552	4455.5	233.8	1.00	90.79	0.1255	285.9894	0.038131	3.3068	0.007535	108.9466	13.61833
	03-01-2015 08	164	87	2290.9	0.5030	1152.3	1.9568	4482.9	235.0	1.00	91.27	0.1255	287.508	0.038334	3.3068	0.007575	109.5251	13.69064
	03-01-2015 09	164	87	2285.2	0.5020	1147.2	1.9607	4480.6	234.5	1.00	91.04	0.1255	286.7926	0.038238	3.3068	0.007557	109.2526	13.65657
	03-01-2015 10	160	88	2279.4	0.4910	1119.2	1.9458	4435.2	233.9	1.00	90.81	0.1255	286.0647	0.038141	3.3068	0.007537	109.9753	13.62191
	03-01-2015 11	164	87	2299.8	0.4930	1133.8	1.9567	4500.0	236.0	1.00	91.63	0.1255	288.6249	0.038483	3.3068	0.007605	109.9506	13.74382
	03-01-2015 12	164	87	2299.1	0.4950	1138.1	1.9650	4517.7	235.9	1.00	91.60	0.1255	288.5371	0.038471	3.3068	0.007603	109.9171	13.73964
	03-01-2015 13	164	87	2300.5	0.4970	1143.3	1.9676	4526.4	236.0	1.00	91.65	0.1255	288.7128	0.038494	3.3068	0.007607	109.9841	13.74801
	03-01-2015 14	164	87	2303.1	0.4970	1144.6	1.9667	4529.4	236.3	1.00	91.76	0.1255	289.0391	0.038538	3.3068	0.007616	110.1084	13.76355
	03-01-2015 15	164	87	2315.1	0.4980	1152.9	1.9499	4514.3	237.5	1.00	92.24	0.1255	290.5451	0.038739	3.3068	0.007656	110.6821	13.83526
	03-01-2015 16	164	87	2311.4	0.5010	1158.0	1.9531	4514.5	237.2	1.00	92.09	0.1255	290.0807	0.038677	3.3068	0.007643	110.5052	13.81315
	03-01-2015 17	164	87	2307.5	0.5060	1167.6	1.9467	4492.1	236.8	1.00	91.93	0.1255	289.5913	0.038612	3.3068	0.00763	110.3187	13.78984
	03-01-2015 18	164	87	2307.4	0.5050	1165.2	1.9319	4457.7	236.7	1.00	91.93	0.1255	289.5787	0.03861	3.3068	0.00763	110.3139	13.78924
	03-01-2015 19	164	87	2309.4	0.5210	1203.2	1.9321	4462.1	236.9	1.00	92.01	0.1255	289.8297	0.038643	3.3068	0.007637	110.4096	13.8012
	03-01-2015 20	163	87	2273.5	0.5080	1154.9	1.9329	4394.5	233.3	1.00	90.58	0.1255	285.3243	0.038043	3.3068	0.007518	108.6932	13.58665
	03-01-2015 21	164	87	2294.6	0.4920	1128.9	1.9393	4450.0	235.4	1.00	91.42	0.1255	287.9723	0.038396	3.3068	0.007588	109.702	13.71275
	03-01-2015 22	162	87	2286.2	0.4980	1138.5	1.9311	4414.9	234.6	1.00	91.08	0.1255	286.9181	0.038255	3.3068	0.00756	109.3004	13.66255
	03-01-2015 23	127	87	1990.6	0.5360	1067.0	1.9333	3848.5	204.2	1.00	79.31	0.1255	249.8203	0.033309	3.3068	0.006582	95.16813	11.89602
	03-02-2015 00	98	87	1729.1	0.5350	925.1	1.9303	3337.7	177.4	1.00	68.89	0.1255	217.0021	0.028933	3.3068	0.005718	82.66614	10.33327
	03-02-2015 01	98	87	1737.2	0.5210	905.1	1.9449	3378.7	178.2	1.00	69.21	0.1255	218.0186	0.029069	3.3068	0.005745	83.05339	10.38167
	03-02-2015 02	98	87	1732.0	0.5160	893.7	1.9573	3390.0	177.7	1.00	69.00	0.1255	217.366	0.028982	3.3068	0.005727	82.80478	10.35506
	03-02-2015 03	98	87	1734.2	0.5170	896.6	1.9529	3386.7	177.9	1.00	69.09	0.1255	217.6421	0.029018	3.3068	0.005735	82.90996	10.36375
	03-02-2015 04	100	87	1765.2	0.5050	891.4	1.9478	3438.2	181.1	1.00	70.33	0.1255	221.5326	0.029537	3.3068	0.005837	84.39203	10.549
	03-02-2015 05	107	87	1816.5	0.4800	871.9	1.9761	3589.5	186.4	1.00	72.37	0.1255	227.9708	0.030396	3.3068	0.006007	86.84462	10.85558
	03-02-2015 06	122	87	1943.0	0.4870	946.2	1.9906	3867.7	199.4	1.00	77.41	0.1255	243.8465	0.032512	3.3068	0.006425	92.89243	11.61155
	03-02-2015 07	152	87	2200.6	0.5170	1137.7	1.9834	4364.6	225.8	1.00	87.67	0.1255	276.1753	0.036823	3.3068	0.007277	105.208	13.151
	03-02-2015 08	166	87	2328.7	0.5140	1197.0	1.9887	4631.2	238.9	1.00	92.78	0.1255	292.2519	0.038966	3.3068	0.0077	111.3323	13.91653
	03-02-2015 09	166	87	2329.9	0.5040	1174.3	1.9880	4631.8	239.0	1.00	92.82	0.1255	292.4025	0.038986	3.3068	0.007704	111.3896	13.92371
	03-02-2015 10	146	87	2133.8	0.5140	1096.8	1.9940	4254.7	218.9	1.00	85.01	0.1255	267.7919	0.035705	3.3068	0.007056	102.0143	12.75179
	03-02-2015 11	113	87	1846.2	0.5430	1002.5	1.9817	3658.6	189.4	1.00	73.55	0.1255	231.6981	0.030893	3.3068	0.006105	88.26454	11.03307
	03-02-2015 12	98	87	1736.4	0.5050	876.9	1.9708	3422.1	178.2	1.00	69.18	0.1255	217.9182	0.029055	3.3068	0.005742	83.01514	10.37689
	03-02-2015 13	98	87	1740.0	0.5170	899.6	1.9677	3423.8	178.5	1.00	69.32	0.1255	218.37	0.029116	3.3068	0.005754	83.18725	10.39841
	03-02-2015 14	98	87	1722.4	0.5380	926.7	1.9707	3394.4	176.7	1.00	68.62	0.1255	216.1612	0.028821	3.3068	0.005696	82.34582	10.29323
	03-02-2015 15	98	87	1717.7	0.5440	934.4	1.9637	3373.1	176.2	1.00	68.43	0.1255	215.5714	0.028742	3.3068	0.00568	82.12112	10.26514
	03-02-2015 16	98	87	1726.6	0.5500	949.6	1.9507	3368.0	177.2	1.00	68.79	0.1255	216.6883	0.028891	3.3068	0.005709	82.54661	10.31833

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-02-2015 17	98	87	1729.0	0.5480	947.5	1.9472	3366.7	177.4	1.00	68.88	0.1255	216.9895	0.028931	3.3068	0.005717	82.66135	10.33267
	03-02-2015 18	98	87	1705.5	0.5510	939.7	1.9606	3343.8	175.0	1.00	67.95	0.1255	214.0403	0.028538	3.3068	0.00564	81.53785	10.19223
	03-02-2015 19	98	88	1726.1	0.5400	932.1	1.9560	3376.2	177.1	1.00	68.77	0.1255	216.6256	0.028883	3.3068	0.005708	82.52271	10.31534
	03-02-2015 20	104	87	1762.9	0.5290	932.6	1.9711	3474.8	180.9	1.00	70.24	0.1255	221.244	0.029499	3.3068	0.00583	84.28207	10.53526
	03-02-2015 21	122	87	1921.1	0.5290	1016.3	1.9862	3815.6	197.1	1.00	76.54	0.1255	241.0981	0.032146	3.3068	0.006353	91.84542	11.48068
	03-02-2015 22	125	87	1960.1	0.5480	1074.1	1.9757	3872.5	201.1	1.00	78.09	0.1255	245.9926	0.032798	3.3068	0.006482	93.70996	11.71375
	03-02-2015 23	123	87	1942.3	0.5560	1079.9	1.9929	3870.9	199.3	1.00	77.38	0.1255	243.7587	0.032501	3.3068	0.006423	92.85896	11.60737
	03-03-2015 00	109	87	1818.8	0.5580	1014.9	1.9904	3620.2	186.6	1.00	72.46	0.1255	228.2594	0.030434	3.3068	0.006014	86.95458	10.86932
	03-03-2015 01	98	88	1727.1	0.5440	939.5	1.9847	3427.8	177.2	1.00	68.81	0.1255	216.7511	0.0289	3.3068	0.005711	82.57052	10.32131
	03-03-2015 02	98	87	1727.0	0.5100	880.8	1.9899	3436.6	177.2	1.00	68.80	0.1255	216.7385	0.028898	3.3068	0.005711	82.56574	10.32072
	03-03-2015 03	95	60	1460.3	0.5970	871.8	1.8183	2655.2	149.8	1.00	58.18	0.1255	183.2677	0.024435	3.3068	0.004829	69.81514	8.726892
	03-03-2015 04	55	0	613.1	0.4450	272.8	1.6178	991.9	62.9	1.00	24.43	0.1255	76.94405	0.010259	3.3068	0.002027	29.31155	3.663944
OUT	03-03-2015 05	1	1	62.1	0.9931	62.1	1.6179	67.2	12.2	0.07	1.65	0.1255	5.198963	0.000693	3.3068	0.000137	1.980526	0.247566
	03-03-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-03-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-04-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-04-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-05-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-06-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-06-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-07-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-08-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-08-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-09-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-10-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-10-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-11-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-12-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-12-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-13-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx (lb/mmBtu)	Common Stack NOx (lb/Hr)	Common Stack SO2 (lb/mmBtu)	Common Stack SO2 (lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal (tons/hr)	PM-10 (lb/mmBtu)	PM-10 (lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-14-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-14-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-15-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-16-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-16-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-17-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-18-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-18-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-19-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Station/Unit ID	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
506516/RES E1-2	03-20-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-20-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-21-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 Lb/mmBtu	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-22-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-22-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-23-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-24-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-24-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-25-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 Lb/mmBtu	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-26-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-26-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-27-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-28-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-28-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-29-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-30-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-30-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	03-31-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-01-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-01-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-02-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-03-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-03-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-04-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-05-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-05-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-06-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx (lb/mmBtu)	Common Stack NOx (lb/Hr)	Common Stack SO2 (lb/mmBtu)	Common Stack SO2 (lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-06-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-07-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-08-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-08-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-09-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-10-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-10-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-11-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-12-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-12-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-13-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-14-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-14-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-15-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-16-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-16-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-17-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-18-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-18-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-19-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-20-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-20-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-21-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-22-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-22-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-23-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-24-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-24-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-25-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-26-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-26-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-27-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-28-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-28-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-29-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-30-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	04-30-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-01-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-02-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-02-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 20	0	0	3.2	0.0000	0.0	0.0000	0.0	0.3	0.48	0.13	0.1255	0.397584	5.3E-05	3.3068	1.05E-05	0.151458	0.018932
	05-03-2015 21	0	0	2.7	0.0089	0.0	0.0000	0.0	0.3	0.08	0.11	0.1255	0.337344	4.5E-05	3.3068	8.89E-06	0.12851	0.016064
	05-03-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-03-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
TRUE	05-04-2015 09	0	0	0.0	0.9927	7.5	0.0000	0.0	0.0	0.08	0.30	0.1255	0.95882	0.000128	3.3068	2.53E-05	0.365259	0.045657
TRUE	05-04-2015 10	0	0	0.0	0.9927	94.8	0.0000	0.0	0.0	1.00	3.80	0.1255	11.98525	0.001598	3.3068	0.000316	4.565737	0.570717
TRUE	05-04-2015 11	0	0	0.0	0.9928	31.9	0.0000	0.0	0.0	0.77	1.28	0.1255	4.02968	0.000537	3.3068	0.000106	1.535092	0.191886
TRUE	05-04-2015 12	0	0	0.0	0.9925	39.9	0.0000	0.0	0.0	1.00	1.60	0.1255	5.0451	0.000673	3.3068	0.000133	1.921912	0.240239
TRUE	05-04-2015 13	0	0	0.0	0.9926	40.4	0.0000	0.0	0.0	1.00	1.62	0.1255	5.10785	0.000681	3.3068	0.000135	1.945817	0.243227
TRUE	05-04-2015 14	0	0	0.0	0.9926	40.1	0.0000	0.0	0.0	1.00	1.61	0.1255	5.0702	0.000676	3.3068	0.000134	1.931474	0.241434
TRUE	05-04-2015 15	0	0	0.0	0.9926	40.1	0.0000	0.0	0.0	1.00	1.61	0.1255	5.0702	0.000676	3.3068	0.000134	1.931474	0.241434
TRUE	05-04-2015 16	0	0	0.0	0.9924	4.7	0.0000	0.0	0.0	0.12	0.19	0.1255	0.59487	7.93E-05	3.3068	1.57E-05	0.226614	0.028327
	05-04-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-04-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-05-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-06-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-06-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-07-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-08-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-08-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-09-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-10-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-10-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-11-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-12-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-12-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-13-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx (lb/mmBtu)	Common Stack NOx (lb/Hr)	Common Stack SO2 (lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-14-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-14-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-15-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-16-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-16-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-17-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-18-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-18-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-19-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-20-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-20-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-21-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-22-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-22-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-23-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-23-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-24-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-25-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-25-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-26-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-27-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-27-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-28-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-29-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-29-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-29-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-29-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-29-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-29-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-29-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-29-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-29-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-29-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
TRUE	05-29-2015 10	0	0	14.3	0.9925	14.0	0.0000	0.0	0.0	0.15	0.56	0.1255	1.763903	0.000235	3.3068	4.65E-05	0.671952	0.083994
TRUE	05-29-2015 11	0	0	30.0	0.9925	29.8	0.0000	0.0	0.0	0.32	1.19	0.1255	3.762992	0.000502	3.3068	9.92E-05	1.433498	0.179187
	05-29-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-29-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	05-29-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
TRUE	05-29-2015 15	0	0	9.8	0.9925	9.3	0.0000	0.0	0.0	0.10	0.37	0.1255	1.175935	0.000157	3.3068	3.1E-05	0.447968	0.055996
TRUE	05-29-2015 16	0	0	25.3	0.9925	25.1	0.0000	0.0	0.0	0.27	1.01	0.1255	3.175025	0.000423	3.3068	8.37E-05	1.209514	0.151189
TRUE	05-29-2015 17	0	0	25.2	0.9925	26.0	0.0000	0.0	0.0	0.28	1.05	0.1255	3.292618	0.000439	3.3068	8.68E-05	1.254311	0.156789
TRUE	05-29-2015 18	0	0	78.5	0.9936	78.0	0.0000	0.0	0.0	1.00	3.13	0.1255	9.85175	0.001314	3.3068	0.00026	3.752988	0.469124
TRUE	05-29-2015 19	1	1	122.6	0.9927	121.7	0.0000	0.0	0.0	1.00	4.88	0.1255	15.3863	0.002051	3.3068	0.000405	5.861355	0.732669

DOE-17-0427-B-000219

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-29-2015 20	0								1.00	4.47	0.1255	14.06855	0.001876	3.3068	0.000371	5.359363	0.66992
	05-29-2015 21	1								1.00	4.45	0.1255	14.01835	0.001869	3.3068	0.000369	5.340239	0.66753
	05-29-2015 22	0								1.00	5.39	0.1255	16.9676	0.002262	3.3068	0.000447	6.463745	0.807968
	05-29-2015 23	0								1.00	6.22	0.1255	19.6031	0.002614	3.3068	0.000517	7.467729	0.933466
	05-30-2015 00	0								1.00	6.47	0.1255	20.39375	0.002719	3.3068	0.000537	7.768924	0.971116
	05-30-2015 01	0								1.00	6.55	0.1255	20.6322	0.002751	3.3068	0.000544	7.859761	0.98247
	05-30-2015 02	0								1.00	6.71	0.1255	21.1342	0.002818	3.3068	0.000557	8.050996	1.006375
	05-30-2015 03	0								1.00	6.00	0.1255	18.91285	0.002522	3.3068	0.000498	7.204781	0.900598
	05-30-2015 04	0								1.00	4.69	0.1255	14.7839	0.001971	3.3068	0.00039	5.631873	0.703984
	05-30-2015 05	0	0	152.0	0.0388	5.9				1.00	6.06	0.1255	19.076	0.002543	3.3068	0.000503	7.266932	0.908367
	05-30-2015 06	8	0	184.2	0.0782	14.4	0.4104	75.6	18.9	1.00	7.34	0.1255	23.1171	0.003082	3.3068	0.000609	8.805375	1.100797
	05-30-2015 07	45	0	495.0	0.2010	99.5	1.3586	672.5	50.8	1.00	19.72	0.1255	62.1225	0.008283	3.3068	0.001637	23.66534	2.958167
	05-30-2015 08	73	0	704.4	0.2490	175.4	1.5632	1101.1	72.3	1.00	28.06	0.1255	88.4022	0.011787	3.3068	0.000329	33.67649	4.209562
	05-30-2015 09	84	0	790.6	0.2800	221.4	1.6566	1309.7	81.1	1.00	31.50	0.1255	99.2203	0.013229	3.3068	0.002614	37.79761	4.724701
	05-30-2015 10	81	0	751.1	0.2580	193.8	1.6803	1262.1	77.1	1.00	29.92	0.1255	94.26305	0.012568	3.3068	0.002484	35.90916	4.488645
	05-30-2015 11	88	0	810.5	0.2950	239.1	1.7242	1397.5	83.2	1.00	32.29	0.1255	101.7178	0.013562	3.3068	0.00268	38.749	4.843625
	05-30-2015 12	89	0	818.8	0.2890	236.6	1.7357	1421.2	84.0	1.00	32.62	0.1255	102.7594	0.013701	3.3068	0.002708	39.14582	4.893227
	05-30-2015 13	97	0	891.4	0.3410	304.0	1.8094	1612.9	91.5	1.00	35.51	0.1255	111.8707	0.014916	3.3068	0.002948	42.61673	5.327092
	05-30-2015 14	97	0	870.4	0.4090	356.0	1.7742	1544.3	89.3	1.00	34.68	0.1255	109.2352	0.014564	3.3068	0.002878	41.61275	5.201594
	05-30-2015 15	118	0	1053.3	0.4040	425.5	1.8418	1940.0	108.1	1.00	41.96	0.1255	132.1892	0.017625	3.3068	0.003483	50.35697	6.294522
	05-30-2015 16	120	0	1076.5	0.4470	481.2	1.8459	1987.1	110.5	1.00	42.89	0.1255	135.1008	0.018013	3.3068	0.00356	51.46614	6.433267
	05-30-2015 17	116	0	1078.3	0.4640	500.3	1.7818	1921.3	110.6	1.00	42.96	0.1255	135.3267	0.018043	3.3068	0.003566	51.55219	6.444024
	05-30-2015 18	110	0	1026.1	0.4510	462.8	1.7850	1831.6	105.3	1.00	40.88	0.1255	128.7756	0.01717	3.3068	0.003393	49.05657	6.132072
	05-30-2015 19	118	0	1178.8	0.4060	478.6	1.6606	1957.5	120.9	1.00	46.96	0.1255	147.9394	0.019725	3.3068	0.003898	56.35697	7.044622
	05-30-2015 20	120	0	1188.4	0.4240	503.9	1.6479	1958.4	121.9	1.00	47.35	0.1255	149.1442	0.019886	3.3068	0.00393	56.81594	7.101992
	05-30-2015 21	96	0	967.6	0.4330	419.0	1.5665	1515.7	99.3	1.00	38.55	0.1255	121.4338	0.016191	3.3068	0.0032	46.25976	5.78247
	05-30-2015 22	104	0	1020.9	0.4250	433.9	1.6271	1661.1	104.7	1.00	40.67	0.1255	128.123	0.017083	3.3068	0.003376	48.80797	6.100996
	05-30-2015 23	99	0	992.9	0.4500	446.8	1.6285	1616.9	101.9	1.00	39.56	0.1255	124.609	0.016614	3.3068	0.003283	47.46932	5.933665
	05-31-2015 00	99	0	1047.8	0.4290	449.5	1.5684	1643.4	107.5	1.00	41.75	0.1255	131.4989	0.017533	3.3068	0.003465	50.09402	6.261753
	05-31-2015 01	100	0	1085.1	0.4460	484.0	1.5668	1700.1	111.3	1.00	43.23	0.1255	136.1801	0.018157	3.3068	0.003588	51.87729	6.484661
	05-31-2015 02	100	0	1083.2	0.4570	495.0	1.5629	1692.9	111.1	1.00	43.16	0.1255	135.9416	0.018125	3.3068	0.003582	51.78645	6.473307
	05-31-2015 03	104	0	1061.7	0.4620	490.5	1.6005	1699.2	108.9	1.00	42.30	0.1255	133.2434	0.017765	3.3068	0.003511	50.75857	6.344821
	05-31-2015 04	101	0	1051.3	0.4630	486.8	1.5853	1666.6	107.9	1.00	41.88	0.1255	131.9382	0.017591	3.3068	0.003476	50.26135	6.282669
	05-31-2015 05	101	0	1050.8	0.4640	487.6	1.5641	1643.6	107.8	1.00	41.86	0.1255	131.8754	0.017583	3.3068	0.003475	50.23745	6.279681
	05-31-2015 06	101	0	1052.5	0.4780	503.1	1.5819	1665.0	108.0	1.00	41.93	0.1255	132.0888	0.017612	3.3068	0.00348	50.31873	6.289841
	05-31-2015 07	103	0	1077.6	0.4590	494.6	1.5751	1697.3	110.6	1.00	42.93	0.1255	135.2388	0.018032	3.3068	0.003563	51.51873	6.439841
	05-31-2015 08	105	5	1114.4	0.4750	529.3	1.5831	1764.2	114.3	1.00	44.40	0.1255	139.8572	0.018647	3.3068	0.003685	53.27809	6.659761
	05-31-2015 09	107	37	1455.7	0.4950	720.6	1.6782	2442.9	149.4	1.00	58.00	0.1255	182.6904	0.024358	3.3068	0.004814	69.59522	8.699402
	05-31-2015 10	109	86	1839.5	0.4430	814.9	1.8501	3403.3	188.7	1.00	73.29	0.1255	230.8573	0.03078	3.3068	0.006083	87.94422	10.99303
	05-31-2015 11	110	118	2052.4	0.4610	946.2	1.9281	3957.3	210.6	1.00	81.77	0.1255	257.5762	0.034343	3.3068	0.006787	98.12271	12.26534
	05-31-2015 12	110	118	2108.0	0.5020	1058.2	1.9488	4108.1	216.3	1.00	83.98	0.1255	264.554	0.035273	3.3068	0.006971	100.7809	12.59761
	05-31-2015 13	111	117	2125.6	0.5000	1062.8	1.9323	4107.3	218.1	1.00	84.69	0.1255	266.7628	0.035568	3.3068	0.007029	101.6223	12.70279
	05-31-2015 14	146	118	2458.3	0.4930	1211.9	1.9663	4833.7	252.2	1.00	97.94	0.1255	308.5167	0.041135	3.3068	0.008129	117.5283	14.69104
	05-31-2015 15	164	126	2709.9	0.5230	1417.3	2.0417	5532.7	278.0	1.00	107.96	0.1255	340.0925	0.045345	3.3068	0.008961	129.557	16.19462
	05-31-2015 16	167	144	2862.2	0.5200	1488.3	2.0751	5939.4	293.7	1.00	114.03	0.1255	359.2061	0.047893	3.3068	0.009465	136.8382	17.10478
	05-31-2015 17	167	155	2956.1	0.5050	1492.8	2.0367	6020.7	303.3	1.00	117.77	0.1255	370.9906	0.049465	3.3068	0.009775	141.3275	17.66594
	05-31-2015 18	167	157	2965.7	0.4930	1462.1	2.0336	6031.1	304.3	1.00	118.16	0.1255	372.1954	0.049625	3.3068	0.009807	141.7865	17.72331

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-31-2015 19	167	156	2923.9	0.4800	1403.5	2.0593	6021.1	300.0	1.00	116.49	0.1255	366.9495	0.048926	3.3068	0.009669	139.788	17.47351
	05-31-2015 20	164	158	2931.8	0.4640	1360.4	2.0477	6003.4	300.8	1.00	116.80	0.1255	367.9409	0.049058	3.3068	0.009695	140.1657	17.52072
	05-31-2015 21	165	159	2945.1	0.4740	1396.0	2.0491	6034.9	302.2	1.00	117.33	0.1255	369.6101	0.049281	3.3068	0.009739	140.8016	17.6002
	05-31-2015 22	161	152	2823.4	0.4810	1358.1	2.0451	5774.2	289.7	1.00	112.49	0.1255	354.3367	0.047244	3.3068	0.009336	134.9833	16.87291
	05-31-2015 23	111	102	1997.2	0.6090	1216.3	1.9935	3981.5	204.9	1.00	79.57	0.1255	250.6486	0.033419	3.3068	0.006604	95.48367	11.93546
	06-01-2015 00	98	98	1869.9	0.5990	1120.1	1.9872	3715.9	191.9	1.00	74.50	0.1255	234.6725	0.031289	3.3068	0.006183	89.39761	11.1747
	06-01-2015 01	98	98	1874.9	0.5830	1093.1	1.9997	3749.2	192.4	1.00	74.70	0.1255	235.3	0.031373	3.3068	0.0062	89.63665	11.20458
	06-01-2015 02	101	98	1900.8	0.5880	1117.7	1.9937	3789.7	195.0	1.00	75.73	0.1255	238.5504	0.031806	3.3068	0.006286	90.8749	11.35936
	06-01-2015 03	101	98	1890.6	0.6050	1143.8	1.9877	3757.9	194.0	1.00	75.32	0.1255	237.2703	0.031636	3.3068	0.006252	90.38725	11.29841
	06-01-2015 04	100	98	1877.4	0.6220	1167.7	1.9966	3748.4	192.6	1.00	74.80	0.1255	235.6137	0.031415	3.3068	0.006208	89.75618	11.21952
	06-01-2015 05	102	98	1875.1	0.6130	1149.4	1.9449	3646.8	192.4	1.00	74.71	0.1255	235.3251	0.031376	3.3068	0.006201	89.64622	11.20578
	06-01-2015 06	107	103	1979.7	0.5930	1174.0	1.9536	3867.6	203.1	1.00	78.87	0.1255	248.4524	0.033126	3.3068	0.006546	94.64701	11.83088
	06-01-2015 07	138	139	2564.4	0.4910	1259.1	1.9915	5107.1	263.1	1.00	102.17	0.1255	321.8322	0.04291	3.3068	0.00848	122.6008	15.3251
	06-01-2015 08	164	172	3030.8	0.3880	1176.0	2.0156	6109.0	311.0	1.00	120.75	0.1255	380.3654	0.050715	3.3068	0.010022	144.8988	18.11235
	06-01-2015 09	169	175	3073.4	0.3830	1177.1	1.9968	6137.1	315.3	1.00	122.45	0.1255	385.7117	0.051427	3.3068	0.010163	146.9355	18.36693
	06-01-2015 10	169	174	3053.7	0.3770	1151.2	1.9986	6103.2	313.3	1.00	121.66	0.1255	383.2394	0.051098	3.3068	0.010098	145.9936	18.2492
	06-01-2015 11	168	174	3047.6	0.3780	1152.0	2.0013	6099.3	312.7	1.00	121.42	0.1255	382.4738	0.050996	3.3068	0.010078	145.702	18.21275
	06-01-2015 12	168	173	3049.1	0.3820	1164.8	1.9821	6043.5	312.8	1.00	121.48	0.1255	382.6621	0.051021	3.3068	0.010083	145.7737	18.22171
	06-01-2015 13	168	173	3054.3	0.3850	1175.9	1.9765	6037.2	313.4	1.00	121.69	0.1255	383.3147	0.051108	3.3068	0.0101	146.0223	18.25279
	06-01-2015 14	168	176	3071.3	0.3880	1191.7	1.9748	6065.1	315.1	1.00	122.36	0.1255	385.4482	0.051392	3.3068	0.010156	146.8351	18.35438
	06-01-2015 15	168	174	3055.0	0.3840	1173.1	1.9561	5975.8	313.4	1.00	121.71	0.1255	383.4025	0.05112	3.3068	0.010102	146.0558	18.25697
	06-01-2015 16	168	175	3061.4	0.3570	1092.9	1.9486	5965.3	314.1	1.00	121.97	0.1255	384.2057	0.051227	3.3068	0.010123	146.3618	18.29522
	06-01-2015 17	165	175	3054.1	0.3720	1136.1	1.9373	5916.7	313.3	1.00	121.68	0.1255	383.2896	0.051104	3.3068	0.010099	146.0127	18.25159
	06-01-2015 18	163	176	3055.4	0.3520	1075.5	1.9256	5883.5	313.5	1.00	121.73	0.1255	383.4527	0.051126	3.3068	0.010104	146.0749	18.25936
	06-01-2015 19	164	177	3072.2	0.3530	1084.5	1.9114	5872.3	315.2	1.00	122.40	0.1255	385.5611	0.051407	3.3068	0.010159	146.8781	18.35976
	06-01-2015 20	165	176	3064.5	0.3550	1087.9	1.8988	5818.8	314.4	1.00	122.09	0.1255	384.5948	0.051278	3.3068	0.010134	146.51	18.31375
	06-01-2015 21	137	145	2532.0	0.3400	860.9	1.8780	4755.2	259.8	1.00	100.88	0.1255	317.766	0.042368	3.3068	0.008373	121.0518	15.13147
	06-01-2015 22	95	130	2069.3	0.3220	666.3	1.8645	3858.2	212.3	1.00	82.44	0.1255	259.6972	0.034626	3.3068	0.006843	98.93068	12.36633
	06-01-2015 23	93	130	2085.3	0.3120	650.6	1.8368	3830.3	214.0	1.00	83.08	0.1255	261.7052	0.034893	3.3068	0.006896	99.69562	12.46195
	06-02-2015 00	94	130	2066.7	0.3160	653.1	1.8316	3785.4	212.0	1.00	82.34	0.1255	259.3709	0.034582	3.3068	0.006834	98.80637	12.3508
	06-02-2015 01	93	130	2058.3	0.3150	648.4	1.8150	3735.9	211.2	1.00	82.00	0.1255	258.3167	0.034442	3.3068	0.006806	98.40478	12.3006
	06-02-2015 02	93	130	2052.8	0.3110	638.4	1.8037	3702.7	210.6	1.00	81.78	0.1255	257.6264	0.03435	3.3068	0.006788	98.14183	12.26773
	06-02-2015 03	93	130	2066.3	0.3220	665.3	1.7825	3683.1	212.0	1.00	82.32	0.1255	259.3207	0.034576	3.3068	0.006833	98.78725	12.34841
	06-02-2015 04	93	130	2064.8	0.3250	671.1	1.7725	3659.9	211.8	1.00	82.26	0.1255	259.1324	0.03455	3.3068	0.006828	98.71554	12.33944
	06-02-2015 05	93	130	2022.7	0.3270	661.4	1.7738	3587.9	207.5	1.00	80.59	0.1255	253.8489	0.033846	3.3068	0.006689	96.70279	12.08785
	06-02-2015 06	93	119	1953.4	0.3240	632.9	1.7684	3454.3	200.4	1.00	77.82	0.1255	245.1517	0.032686	3.3068	0.006459	93.38964	11.67371
	06-02-2015 07	93	114	1952.4	0.3550	693.1	1.6968	3312.8	200.3	1.00	77.78	0.1255	245.0262	0.03267	3.3068	0.006456	93.34183	11.66773
	06-02-2015 08	95	140	2185.7	0.3350	732.2	1.6815	3675.3	224.3	1.00	87.08	0.1255	274.3054	0.036573	3.3068	0.007228	104.4956	13.06195
	06-02-2015 09	96	175	2485.5	0.3440	855.0	1.6923	4206.1	255.0	1.00	99.02	0.1255	311.9303	0.04159	3.3068	0.008219	118.8287	14.85359
	06-02-2015 10	132	176	2834.0	0.3450	977.7	1.6825	4768.2	290.8	1.00	112.91	0.1255	355.667	0.047422	3.3068	0.009371	135.49	16.93625
	06-02-2015 11	161	176	3108.9	0.3350	1041.5	1.6894	5252.3	319.0	1.00	123.86	0.1255	390.167	0.052021	3.3068	0.01028	148.5327	18.57908
	06-02-2015 12	162	176	3098.6	0.3370	1044.2	1.6781	5199.7	317.9	1.00	123.45	0.1255	388.8743	0.051849	3.3068	0.010246	148.1402	18.51753
	06-02-2015 13	132	176	2882.1	0.3370	971.3	1.6715	4817.3	295.7	1.00	114.82	0.1255	361.7036	0.048226	3.3068	0.00953	137.7896	17.22371
	06-02-2015 14	145	175	3009.1	0.3460	1041.1	1.6646	5008.9	308.7	1.00	119.88	0.1255	377.6421	0.050351	3.3068	0.00995	143.8614	17.98267
	06-02-2015 15	140	158	2724.9	0.3450	940.1	1.6552	4510.3	279.6	1.00	108.56	0.1255	341.975	0.045596	3.3068	0.009011	130.2741	16.28426
	06-02-2015 16	97	151	2276.7	0.3280	746.8	1.6571	3772.7	233.6	1.00	90.71	0.1255	285.7259	0.038096	3.3068	0.007529	108.8462	13.60578
	06-02-2015 17	94	141	2160.0	0.3130	676.1	1.6597	3606.6	221.6	1.00	86.06	0.1255	271.08	0.036143	3.3068	0.007143	103.2669	12.90837

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	06-02-2015 18	94	149	2270.2	0.3110	706.0	1.6563	3760.1	232.9	1.00	90.45	0.1255	284.9101	0.037987	3.3068	0.007507	108.5355	13.56693
	06-02-2015 19	93	117	1953.0	0.3070	599.6	1.6673	3256.2	200.4	1.00	77.81	0.1255	245.1015	0.03268	3.3068	0.006458	93.37052	11.67131
	06-02-2015 20	93	99	1842.8	0.3110	573.1	1.6593	3057.7	189.1	1.00	73.42	0.1255	231.2714	0.030836	3.3068	0.006094	88.10199	11.01275
	06-02-2015 21	94	99	1873.2	0.3220	603.2	1.6430	3077.7	192.2	1.00	74.63	0.1255	235.0866	0.031344	3.3068	0.006194	89.55538	11.19442
	06-02-2015 22	92	99	1824.8	0.3280	598.5	1.6578	3025.2	187.2	1.00	72.70	0.1255	229.0124	0.030535	3.3068	0.006034	87.24143	10.90518
	06-02-2015 23	92	99	1840.0	0.3270	601.7	1.6540	3043.4	188.8	1.00	73.31	0.1255	230.92	0.030789	3.3068	0.006084	87.96813	10.99602
	06-03-2015 00	94	99	1829.4	0.3240	592.7	1.6537	3025.3	187.7	1.00	72.88	0.087	159.1578	0.030611	3.3068	0.006049	87.46135	10.93267
	06-03-2015 01	94	99	1832.1	0.3290	602.8	1.6520	3026.7	188.0	1.00	72.99	0.087	159.3927	0.030657	3.3068	0.006058	87.59044	10.9488
	06-03-2015 02	94	99	1831.8	0.3320	608.2	1.6484	3019.5	187.9	1.00	72.98	0.087	159.3666	0.030652	3.3068	0.006057	87.5761	10.94701
	06-03-2015 03	94	99	1826.7	0.3250	593.7	1.6497	3013.5	187.4	1.00	72.78	0.087	158.9229	0.030566	3.3068	0.00604	87.33227	10.91653
	06-03-2015 04	94	99	1825.5	0.3240	591.5	1.6553	3021.8	187.3	1.00	72.73	0.087	158.8185	0.030546	3.3068	0.006037	87.2749	10.90936
	06-03-2015 05	94	99	1823.2	0.3200	583.4	1.6420	2993.7	187.1	1.00	72.64	0.087	158.6184	0.030508	3.3068	0.006029	87.16494	10.89562
	06-03-2015 06	124	138	2443.8	0.3410	833.3	1.6662	4071.9	250.7	1.00	97.36	0.087	212.6106	0.040892	3.3068	0.008081	116.8351	14.60438
	06-03-2015 07	156	176	3060.2	0.3650	1117.0	1.6680	5104.5	314.0	1.00	121.92	0.087	266.2374	0.051207	3.3068	0.010119	146.3044	18.28805
	06-03-2015 08	157	176	3053.6	0.3680	1123.7	1.6671	5090.6	313.3	1.00	121.66	0.087	265.6632	0.051096	3.3068	0.010098	145.9888	18.24861
	06-03-2015 09	157	176	3066.5	0.3610	1107.0	1.6571	5081.6	314.6	1.00	122.17	0.087	266.7855	0.051312	3.3068	0.01014	146.6056	18.3257
	06-03-2015 10	157	176	3042.9	0.3530	1074.1	1.6629	5060.1	312.2	1.00	121.23	0.087	264.7323	0.050917	3.3068	0.010062	145.4773	18.18466
	06-03-2015 11	157	176	3029.8	0.3490	1057.4	1.6638	5041.1	310.9	1.00	120.71	0.087	263.5926	0.050698	3.3068	0.010019	144.851	18.10637
	06-03-2015 12	157	176	3028.1	0.3520	1065.9	1.6647	5041.0	310.7	1.00	120.64	0.087	263.4447	0.050669	3.3068	0.010013	144.7697	18.09622
	06-03-2015 13	157	174	3036.1	0.3500	1062.6	1.6528	5018.2	311.5	1.00	120.96	0.087	264.1407	0.050803	3.3068	0.01004	145.1522	18.14402
	06-03-2015 14	156	175	2987.5	0.3500	1045.6	1.6687	4985.3	306.5	1.00	119.02	0.087	259.9125	0.04999	3.3068	0.009879	142.8287	17.85359
	06-03-2015 15	157	175	3025.2	0.3500	1058.8	1.6641	5034.3	310.4	1.00	120.53	0.087	263.1924	0.050621	3.3068	0.010004	144.6311	18.07888
	06-03-2015 16	165	176	3117.9	0.3590	1119.3	1.6626	5183.9	319.9	1.00	124.22	0.087	271.2573	0.052172	3.3068	0.01031	149.0629	18.63287
	06-03-2015 17	171	177	3154.6	0.3610	1138.8	1.6669	5258.4	323.7	1.00	125.68	0.087	274.4502	0.052786	3.3068	0.010432	150.8175	18.85219
	06-03-2015 18	171	177	3151.4	0.3620	1140.8	1.6611	5234.7	323.3	1.00	125.55	0.087	274.1718	0.052733	3.3068	0.010421	150.6645	18.83307
	06-03-2015 19	171	177	3156.9	0.3650	1152.3	1.6577	5233.2	323.9	1.00	125.77	0.087	274.6503	0.052825	3.3068	0.010439	150.9275	18.86594
	06-03-2015 20	171	177	3139.6	0.3620	1136.5	1.6669	5233.4	322.1	1.00	125.08	0.087	273.1452	0.052535	3.3068	0.010382	150.1004	18.76255
	06-03-2015 21	172	177	3165.0	0.3580	1133.1	1.6561	5241.4	324.7	1.00	126.10	0.087	275.355	0.05296	3.3068	0.010466	151.3147	18.91434
	06-03-2015 22	153	157	2774.7	0.3830	1062.7	1.6608	4608.2	284.7	1.00	110.55	0.087	241.3989	0.046429	3.3068	0.009175	132.655	16.58187
	06-03-2015 23	96	106	1872.1	0.3890	728.2	1.6231	3038.6	192.1	1.00	74.59	0.087	162.8727	0.031326	3.3068	0.006191	89.50279	11.18785
	06-04-2015 00	61	99	1496.3	0.3830	573.1	1.5484	2316.8	153.5	1.00	59.61	0.087	130.1781	0.025038	3.3068	0.004948	71.53625	8.942032
	06-04-2015 01	0	91	825.1	0.3720	306.9	1.4603	1204.9	84.7	1.00	32.87	0.087	71.7837	0.013806	3.3068	0.002728	39.44701	4.930876
	06-04-2015 02	0	7	73.9	0.1568	11.6	0.9913	73.3	7.6	0.28	2.95	0.087	6.43104	0.001237	3.3068	0.000244	3.534024	0.441753
	06-04-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-04-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-06-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-08-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-10-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-12-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/78Btu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-14-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-16-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr.	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-18-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-20-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-22-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-24-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-26-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-28-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-30-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-02-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-04-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-06-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-08-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-09-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-11-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
TRUE	07-13-2015 18	0	0	0.3	0.0000	0.0	0.0000	0.0	0.0	0.30	0.01	0.087	0.0261	5.02E-06	3.3068	9.92E-07	0.014343	0.001793
TRUE	07-13-2015 19	0	0	1.0	0.0000	0.0	0.0000	0.0	0.0	1.00	0.04	0.087	0.087	1.67E-05	3.3068	3.31E-06	0.047809	0.005976
TRUE	07-13-2015 20	0	0	1.0	0.0000	0.0	0.0000	0.0	0.0	1.00	0.04	0.087	0.087	1.67E-05	3.3068	3.31E-06	0.047809	0.005976

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
TRUE	07-13-2015 21	0	0	110	0.0000	0.0	0.0000	0.0	0.0	1.00	0.04	0.087	0.087	1.67E-05	3.3068	3.31E-06	0.047809	0.005976
TRUE	07-13-2015 22	0	0	110	0.0000	0.0	0.0000	0.0	0.0	1.00	0.04	0.087	0.087	1.67E-05	3.3068	3.31E-06	0.047809	0.005976
	07-13-2015 23	0	0	30.8	0.0032	0.1	0.0000	0.0	3.2	1.00	1.23	0.087	2.6796	0.000515	3.3068	0.000102	1.47251	0.184064
	07-14-2015 00	0	0	79.2	0.0088	0.7	0.0000	0.0	8.1	1.00	3.16	0.087	6.8904	0.001325	3.3068	0.000262	3.785454	0.473307
	07-14-2015 01	0	0	144.7	0.0187	2.7	0.0000	0.0	14.8	1.00	5.76	0.087	12.5889	0.002421	3.3068	0.000478	6.917928	0.864741
	07-14-2015 02	0	0	128.2	0.0211	2.7	0.0148	1.9	13.2	1.00	5.11	0.087	11.1534	0.002145	3.3068	0.000424	6.129084	0.766135
	07-14-2015 03	0	0	95.4	0.0157	1.5	0.0000	0.0	9.8	1.00	3.80	0.087	8.2998	0.001596	3.3068	0.000315	4.560956	0.57012
	07-14-2015 04	0	0	95.3	0.0157	1.5	0.0000	0.0	9.8	1.00	3.80	0.087	8.2911	0.001595	3.3068	0.000315	4.556175	0.569522
	07-14-2015 05	0	0	95.3	0.0168	1.6	0.0094	0.9	9.8	1.00	3.80	0.087	8.2911	0.001595	3.3068	0.000315	4.556175	0.569522
	07-14-2015 06	0	0	111.5	0.0197	2.2	0.0170	1.9	11.4	1.00	4.44	0.087	9.7005	0.001866	3.3068	0.000369	5.330677	0.666335
	07-14-2015 07	0	0	127.3	0.0212	2.7	0.0228	2.9	13.1	1.00	5.07	0.087	11.0751	0.00213	3.3068	0.000421	6.086056	0.760757
	07-14-2015 08	0	0	127.1	0.0212	2.7	0.0189	2.4	13.0	1.00	5.06	0.087	11.0577	0.002127	3.3068	0.00042	6.076494	0.759562
	07-14-2015 09	0	0	144.0	0.0250	3.6	0.0333	4.8	14.8	1.00	5.74	0.087	12.528	0.00241	3.3068	0.000476	6.884462	0.860558
	07-14-2015 10	0	0	165.6	0.0288	4.8	0.0390	6.5	17.1	1.00	6.64	0.087	14.4942	0.002788	3.3068	0.000551	7.96494	0.995618
	07-14-2015 11	0	0	201.0	0.0368	7.4	0.0299	6.0	20.6	1.00	8.01	0.087	17.487	0.003363	3.3068	0.000665	9.609562	1.201195
	07-14-2015 12	0	0	218.1	0.0408	8.9	0.0275	6.0	22.4	1.00	8.69	0.087	18.9747	0.003649	3.3068	0.000721	10.42709	1.303386
	07-14-2015 13	0	0	235.8	0.0509	12.0	0.0254	6.0	24.2	1.00	9.39	0.087	20.5146	0.003946	3.3068	0.00078	11.27331	1.409163
	07-14-2015 14	0	4	302.2	0.1152	34.8	0.2806	84.8	31.0	1.00	12.04	0.087	26.2914	0.005057	3.3068	0.000999	14.44781	1.805976
	07-14-2015 15	0	10	382.8	0.2270	86.9	0.5624	215.3	39.3	1.00	15.25	0.087	33.3036	0.006405	3.3068	0.001266	18.3012	2.287649
	07-14-2015 16	0	26	510.6	0.3249	165.9	0.8584	438.3	52.4	1.00	20.34	0.087	44.4222	0.008544	3.3068	0.001688	24.41116	3.051394
	07-14-2015 17	0	46	654.3	0.3949	258.4	1.0095	660.5	67.1	1.00	26.07	0.087	56.9241	0.010948	3.3068	0.002164	31.28127	3.910159
	07-14-2015 18	0	65	768.3	0.3290	252.8	1.1153	856.9	78.8	1.00	30.61	0.087	66.8421	0.012856	3.3068	0.002541	36.73147	4.591434
	07-14-2015 19	0	77	796.7	0.4409	351.3	1.1362	905.2	81.7	1.00	31.74	0.087	69.3129	0.013331	3.3068	0.002635	38.08924	4.761155
	07-14-2015 20	0	85	860.2	0.5200	447.3	1.1543	992.9	88.3	1.00	34.27	0.087	74.8374	0.014394	3.3068	0.002844	41.1251	5.140637
	07-14-2015 21	0	110	1036.1	0.4950	512.9	1.2544	1299.7	106.3	1.00	41.28	0.087	90.1407	0.017337	3.3068	0.003426	49.53466	6.191833
	07-14-2015 22	0	115	1158.8	0.4880	565.5	1.1858	1374.1	118.9	1.00	46.17	0.087	100.8156	0.01939	3.3068	0.003832	55.4008	6.9251
	07-14-2015 23	56	115	1727.6	0.4520	780.9	1.3635	2355.5	177.2	1.00	68.83	0.087	150.3012	0.028908	3.3068	0.005713	82.59442	10.3243
	07-15-2015 00	130	115	2435.9	0.4860	1183.8	1.5027	3660.5	249.9	1.00	97.05	0.087	211.9233	0.04076	3.3068	0.008055	116.4574	14.55717
	07-15-2015 01	148	115	2587.2	0.4900	1267.7	1.5417	3988.6	265.4	1.00	103.08	0.087	225.0864	0.043292	3.3068	0.008555	123.6908	15.46135
	07-15-2015 02	163	116	2726.5	0.4620	1259.6	1.5538	4236.4	279.7	1.00	108.63	0.087	237.2055	0.045623	3.3068	0.009016	130.3506	16.29382
	07-15-2015 03	165	116	2736.5	0.4570	1250.6	1.5504	4242.7	280.8	1.00	109.02	0.087	238.0755	0.04579	3.3068	0.009049	130.8287	16.35359
	07-15-2015 04	166	120	2788.7	0.4310	1201.9	1.5484	4317.9	286.1	1.00	111.10	0.087	242.6169	0.046664	3.3068	0.009222	133.3243	16.66554
	07-15-2015 05	166	120	2743.3	0.4680	1283.9	1.5466	4242.9	281.5	1.00	109.29	0.087	238.6671	0.045904	3.3068	0.009071	131.1538	16.39422
	07-15-2015 06	144	121	2562.1	0.4570	1170.9	1.5353	3933.5	262.9	1.00	102.08	0.087	222.9027	0.042872	3.3068	0.008472	122.4908	15.31135
	07-15-2015 07	97	122	2158.1	0.4750	1025.1	1.5097	3258.1	221.4	1.00	85.98	0.087	187.7547	0.036112	3.3068	0.007136	103.1761	12.89701
	07-15-2015 08	95	123	2168.6	0.4630	1004.1	1.5000	3252.8	222.5	1.00	86.40	0.087	188.6682	0.036287	3.3068	0.007171	103.6781	12.95976
	07-15-2015 09	128	122	2464.6	0.4540	1118.9	1.5242	3756.5	252.9	1.00	98.19	0.087	214.4202	0.04124	3.3068	0.00815	117.8295	14.72869
	07-15-2015 10	166	123	2772.9	0.4950	1372.6	1.5336	4252.6	284.5	1.00	110.47	0.087	241.2423	0.046399	3.3068	0.009169	132.5689	16.57112
	07-15-2015 11	168	118	2777.3	0.4990	1385.9	1.5510	4307.6	284.9	1.00	110.65	0.087	241.6251	0.046473	3.3068	0.009184	132.7793	16.59741
	07-15-2015 12	167	118	2761.2	0.4870	1344.7	1.6059	4434.1	283.3	1.00	110.01	0.087	240.2244	0.046203	3.3068	0.009131	132.0096	16.5012
	07-15-2015 13	166	117	2764.0	0.4730	1307.4	1.6078	4444.0	283.6	1.00	110.12	0.087	240.468	0.04625	3.3068	0.00914	132.1434	16.51793
	07-15-2015 14	165	117	2778.6	0.4520	1255.9	1.5932	4426.8	285.1	1.00	110.70	0.087	241.7382	0.046495	3.3068	0.009188	132.8414	16.60518
	07-15-2015 15	165	117	2760.2	0.4610	1272.5	1.6033	4425.3	283.2	1.00	109.97	0.087	240.1374	0.046187	3.3068	0.009127	131.9618	16.49522
	07-15-2015 16	165	125	2819.4	0.4470	1260.3	1.5723	4433.0	289.3	1.00	112.33	0.087	245.2878	0.047177	3.3068	0.009323	134.792	16.849
	07-15-2015 17	166	137	2908.4	0.4320	1256.4	1.5182	4415.6	298.4	1.00	115.87	0.087	253.0308	0.048666	3.3068	0.009617	139.047	17.38088
	07-15-2015 18	158	142	2852.4	0.4440	1266.5	1.4810	4224.4	292.7	1.00	113.64	0.087	248.1588	0.047729	3.3068	0.009432	136.3697	17.04622
	07-15-2015 19	163	145	2922.3	0.4730	1382.2	1.4780	4319.2	299.8	1.00	116.43	0.087	254.2401	0.048899	3.3068	0.009663	139.7116	17.46394

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-15-2015 20	158	145	2867.6	0.4790	1373.6	1.4669	4206.4	294.2	1.00	114.25	0.087	249.4812	0.047984	3.3068	0.009483	137.0964	17.13705
	07-15-2015 21	158	136	2793.3	0.4470	1248.6	1.4702	4106.7	286.6	1.00	111.29	0.087	243.0171	0.04674	3.3068	0.009237	133.5442	16.69303
	07-15-2015 22	157	100	2440.5	0.3790	924.9	1.4448	3526.1	250.4	1.00	97.23	0.087	212.3235	0.040837	3.3068	0.00807	116.6773	14.58466
	07-15-2015 23	120	95	2071.9	0.3270	677.5	1.4297	2962.2	212.6	1.00	82.55	0.087	180.2553	0.034669	3.3068	0.006851	99.05498	12.38187
	07-16-2015 00	115	96	2061.2	0.3400	700.8	1.4297	2946.8	211.5	1.00	82.12	0.087	179.3244	0.03449	3.3068	0.006816	98.54343	12.31793
	07-16-2015 01	115	97	2082.1	0.3500	728.7	1.4159	2948.0	213.6	1.00	82.95	0.087	181.1427	0.03484	3.3068	0.006885	99.54263	12.44283
	07-16-2015 02	86	95	1764.2	0.3410	601.6	1.3731	2422.4	181.0	1.00	70.29	0.087	153.4854	0.02952	3.3068	0.005834	84.34422	10.54303
	07-16-2015 03	61	88	1498.2	0.3680	551.3	1.3299	1992.5	153.7	1.00	59.69	0.087	130.3434	0.025069	3.3068	0.004954	71.62709	8.953386
	07-16-2015 04	38	62	1076.4	0.4410	474.7	1.2246	1318.2	110.4	1.00	42.88	0.087	93.6468	0.018011	3.3068	0.003559	51.46135	6.432669
	07-16-2015 05	38	51	938.6	0.3480	326.6	1.1618	1090.5	96.3	1.00	37.39	0.087	81.6582	0.015706	3.3068	0.003104	44.87331	5.609163
	07-16-2015 06	0	26	310.4	0.2190	68.0	1.0792	335.0	31.9	0.60	12.37	0.087	27.00828	0.005195	3.3068	0.001027	14.84175	1.855219
	07-16-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-17-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-19-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-21-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-22-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-23-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-23-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-24-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-25-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-25-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-26-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-27-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-27-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-28-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
TRUE	07-29-2015 04	0	0	0.9	0.0000	0.0	0.0000	0.0	0.0	0.87	0.03	0.087	0.07569	1.46E-05	3.3068	2.88E-06	0.041594	0.005199
TRUE	07-29-2015 05	0	0	1.0	0.0000	0.0	0.0000	0.0	0.0	1.00	0.04	0.087	0.087	1.67E-05	3.3068	3.31E-06	0.047809	0.005976
TRUE	07-29-2015 06	0	0	1.0	0.0000	0.0	0.0000	0.0	0.0	1.00	0.04	0.087	0.087	1.67E-05	3.3068	3.31E-06	0.047809	0.005976
TRUE	07-29-2015 07	0	0	1.0	0.0000	0.0	0.0000	0.0	0.0	1.00	0.04	0.087	0.087	1.67E-05	3.3068	3.31E-06	0.047809	0.005976
	07-29-2015 08	1	0	14.5	0.0000	0.0	0.0000	0.0	1.5	1.00	0.58	0.087	1.2615	0.000243	3.3068	4.79E-05	0.693227	0.086653
	07-29-2015 09	0	0	14.7	0.0000	0.0	0.0000	0.0	1.5	1.00	0.59	0.087	1.2789	0.000246	3.3068	4.86E-05	0.702789	0.087849
	07-29-2015 10	0	0	14.8	0.0000	0.0	0.0000	0.0	1.5	1.00	0.59	0.087	1.2876	0.000248	3.3068	4.89E-05	0.70757	0.088446
	07-29-2015 11	0	1	14.8	0.0000	0.0	0.0000	0.0	1.5	1.00	0.59	0.087	1.2876	0.000248	3.3068	4.89E-05	0.70757	0.088446
	07-29-2015 12	0	0	14.7	0.0000	0.0	0.0000	0.0	1.5	1.00	0.59	0.087	1.2789	0.000246	3.3068	4.86E-05	0.702789	0.087849

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-29-2015 13	0	1	12.1	0.0000	0.0	0.0000	0.0	1.2	1.00	0.48	0.087	1.0527	0.000202	3.3068	4E-05	0.578486	0.072311
	07-29-2015 14	0	0	1.2	0.0000	0.0	0.0000	0.0	0.1	0.12	0.05	0.087	0.102312	1.97E-05	3.3068	3.89E-06	0.056223	0.007028
	07-29-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-31-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-02-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-04-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-06-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-08-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-10-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-11-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-12-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-12-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-13-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-14-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-14-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-15-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-16-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-16-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-17-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-18-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 05	1	1	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-20-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-22-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-24-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-25-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-26-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-27-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-27-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-29-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-31-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-02-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-04-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (Lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-06-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-08-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-08-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-09-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-10-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-12-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-14-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-16-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-18-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-20-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 06	0	0	1.5	0.0000	0.0	0.0000	0.0	0.2	0.10	0.06	0.087	0.1305	2.51E-05	3.3068	4.96E-06	0.071713	0.008964
	09-22-2015 07	0	0	15.3	0.0000	0.0	0.0000	0.0	1.6	1.00	0.61	0.087	1.3311	0.000256	3.3068	5.06E-05	0.731474	0.091434
	09-22-2015 08	1	1	15.2	0.0000	0.0	0.0000	0.0	1.6	1.00	0.61	0.087	1.3224	0.000254	3.3068	5.03E-05	0.726693	0.090837

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-22-2015 09	0	0	45.7	0.0044	0.2	0.0000	0.0	4.7	1.00	1.82	0.087	3.9759	0.000765	3.3068	0.000151	2.184861	0.273108
	09-22-2015 10	1	1	15.9	0.0000	0.0	0.0000	0.0	1.6	1.00	0.63	0.087	1.3833	0.000266	3.3068	5.26E-05	0.760159	0.09502
	09-22-2015 11	0	0	16.0	0.0000	0.0	0.0000	0.0	1.6	1.00	0.64	0.087	1.392	0.000268	3.3068	5.29E-05	0.76494	0.095618
	09-22-2015 12	0	0	16.0	0.0000	0.0	0.0000	0.0	1.6	1.00	0.64	0.087	1.392	0.000268	3.3068	5.29E-05	0.76494	0.095618
TRUE	09-22-2015 13	1	1	1.9	0.0000	0.0	0.0000	0.0	0.0	1.00	0.04	0.087	0.087	1.67E-05	3.3068	3.31E-06	0.047809	0.005976
TRUE	09-22-2015 14	1	0	0.3	0.0000	0.0	0.0000	0.0	0.0	0.32	0.01	0.087	0.02784	5.35E-06	3.3068	1.05E-06	0.015299	0.001912
	09-22-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-24-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-26-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-28-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-30-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Submitted Data	Date/Hour	Y01 Gross Load MW Value	Y02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-02-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-04-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-06-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-08-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx (lb/mmBtu)	Common Stack NOx (lb/Hr)	Common Stack SO2 (lb/mmBtu)	Common Stack SO2 (lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-10-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-11-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-13-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-15-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-17-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-19-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-21-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-23-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-25-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-27-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-29-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-31-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-02-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-04-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-06-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 Lb/mmBtu	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-08-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-10-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-12-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-14-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-16-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-18-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
TRUE	11-18-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.15	0.01	0.087	0.01305	2.51E-06	3.3068	4.96E-07	0.007171	0.000896
	11-18-2015 17	0	0	13.8	0.0056	0.1	0.0000	0.0	1.4	0.78	0.55	0.087	1.201122	0.000231	3.3068	4.57E-05	0.660048	0.082506
	11-18-2015 18	0	0	18.7	0.0120	0.2	0.0000	0.0	1.9	0.45	0.75	0.087	1.62864	0.000313	3.3068	6.19E-05	0.89498	0.111873
	11-18-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
TRUE	11-19-2015 03	0	0	30.2	0.0440	1.3	0.8626	29.0	8.1	0.08	1.20	0.087	2.624616	0.000505	3.3068	9.98E-05	1.442295	0.180287
TRUE	11-19-2015 04	1	1	403.3	0.0439	17.7	0.8629	345.0	41.4	1.00	16.07	0.087	35.0871	0.006748	3.3068	0.001334	19.28127	2.410159
TRUE	11-19-2015 05	0	0	412.6	0.0441	18.2	0.8628	356.0	42.3	1.00	16.44	0.087	35.8962	0.006904	3.3068	0.001364	19.7259	2.465737
	11-19-2015 06	0	0	728.3	0.3120	227.2	0.9412	685.5	74.7	1.00	29.02	0.087	63.3621	0.012187	3.3068	0.002408	34.81912	4.35239
	11-19-2015 07	0	0	149.1	0.0389	5.8	0.0000	0.0	15.3	1.00	5.94	0.087	12.9717	0.002495	3.3068	0.000493	7.128287	0.891036
	11-19-2015 08	0	0	148.2	0.0398	5.9	0.0000	0.0	15.2	1.00	5.90	0.087	12.8934	0.00248	3.3068	0.00049	7.085259	0.885657
	11-19-2015 09	0	0	147.3	0.0401	5.9	0.0000	0.0	15.1	1.00	5.87	0.087	12.8151	0.002465	3.3068	0.000487	7.042231	0.880279
	11-19-2015 10	0	0	162.9	0.0448	7.3	0.0000	0.0	16.7	1.00	6.49	0.087	14.1723	0.002726	3.3068	0.000539	7.788048	0.973506
	11-19-2015 11	0	0	178.7	0.0470	8.4	0.0000	0.0	18.3	1.00	7.12	0.087	15.5469	0.00299	3.3068	0.000591	8.543426	1.067928
	11-19-2015 12	0	0	177.7	0.0473	8.4	0.0000	0.0	18.2	1.00	7.08	0.087	15.4599	0.002973	3.3068	0.000588	8.495618	1.061952
	11-19-2015 13	0	0	193.6	0.0501	9.7	0.0000	0.0	19.9	1.00	7.71	0.087	16.8432	0.00324	3.3068	0.00064	9.255777	1.156972
	11-19-2015 14	0	0	183.7	0.0490	9.0	0.0054	1.0	18.8	1.00	7.32	0.087	15.9819	0.003074	3.3068	0.000607	8.78247	1.097809
	11-19-2015 15	0	0	174.0	0.0460	8.0	0.0000	0.0	17.9	1.00	6.93	0.087	15.138	0.002912	3.3068	0.000575	8.318725	1.039841
	11-19-2015 16	0	0	212.1	0.0471	10.0	0.0000	0.0	21.8	1.00	8.45	0.087	18.4527	0.003549	3.3068	0.000701	10.14024	1.26753
	11-19-2015 17	0	0	246.9	0.0830	20.5	0.1665	41.1	25.3	1.00	9.84	0.087	21.4803	0.004131	3.3068	0.000816	11.80398	1.475498
	11-19-2015 18	0	0	212.2	0.0471	10.0	0.0099	2.1	21.8	1.00	8.45	0.087	18.4614	0.003551	3.3068	0.000702	10.14502	1.268127
	11-19-2015 19	0	0	212.2	0.0481	10.2	0.0099	2.1	21.8	1.00	8.45	0.087	18.4614	0.003551	3.3068	0.000702	10.14502	1.268127
	11-19-2015 20	14	0	388.6	0.1799	69.9	0.3736	145.2	39.9	1.00	15.48	0.087	33.8082	0.006502	3.3068	0.001285	18.57849	2.322311
	11-19-2015 21	43	0	666.8	0.2849	190.0	0.9420	628.1	68.4	1.00	26.57	0.087	58.0115	0.011158	3.3068	0.002205	31.87888	3.984861
	11-19-2015 22	62	0	821.0	0.3829	314.4	1.0452	858.1	84.2	1.00	32.71	0.087	71.427	0.013738	3.3068	0.002715	39.251	4.906375
	11-19-2015 23	62	0	821.2	0.3330	273.5	1.0577	868.6	84.2	1.00	32.72	0.087	71.4444	0.013741	3.3068	0.002716	39.26056	4.90757
	11-20-2015 00	68	0	888.5	0.2680	238.1	1.1107	986.9	91.2	1.00	35.40	0.087	77.2995	0.014867	3.3068	0.002938	42.47809	5.309761
	11-20-2015 01	62	0	819.3	0.3241	265.5	1.0699	876.6	84.1	1.00	32.64	0.087	71.2791	0.013709	3.3068	0.002709	39.16972	4.896215
	11-20-2015 02	66	0	861.1	0.2890	248.9	1.1139	959.2	88.4	1.00	34.31	0.087	74.9157	0.014409	3.3068	0.002847	41.16813	5.146016

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-20-2015 03	54	0	755.3	0.3670	277.2	1.0486	792.0	77.5	1.00	30.09	0.087	65.7111	0.012638	3.3068	0.002498	36.10996	4.513745
	11-20-2015 04	54	0	743.4	0.3940	292.9	1.0124	752.6	76.3	1.00	29.62	0.087	64.6758	0.012439	3.3068	0.002458	35.54104	4.442629
	11-20-2015 05	9	0	115.6	0.0242	2.8	0.0424	4.9	11.9	1.00	4.61	0.087	10.0572	0.001934	3.3068	0.000382	5.526693	0.690837
	11-20-2015 06	0	0	119.8	0.0217	2.6	0.0259	3.1	12.3	1.00	4.77	0.087	10.4226	0.002005	3.3068	0.000396	5.72749	0.715936
	11-20-2015 07	0	0	41.0	0.0176	0.7	0.0098	0.4	4.2	0.40	1.63	0.087	3.56352	0.000685	3.3068	0.000135	1.958247	0.244781
	11-20-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2015 12	0	0	49.9	0.0093	0.5	0.0000	0.0	5.1	0.93	1.99	0.087	4.344867	0.000836	3.3068	0.000165	2.387618	0.298452
	11-20-2015 13	0	0	129.2	0.0201	2.6	0.0255	3.3	13.3	1.00	5.15	0.087	11.2404	0.002162	3.3068	0.000427	6.176892	0.772112
	11-20-2015 14	0	0	131.9	0.0220	2.9	0.0258	3.4	13.5	1.00	5.25	0.087	11.4753	0.002207	3.3068	0.000436	6.305976	0.788247
	11-20-2015 15	0	0	135.9	0.0221	3.0	0.0302	4.1	13.9	1.00	5.41	0.087	11.8233	0.002274	3.3068	0.000449	6.497211	0.812151
	11-20-2015 16	0	31	531.6	0.2560	136.1	0.9851	523.7	54.5	1.00	21.18	0.087	46.2492	0.008895	3.3068	0.001758	25.41514	3.176892
	11-20-2015 17	0	73	717.2	0.3360	241.0	1.0000	792.0	77.5	1.00	28.57	0.087	62.3964	0.012001	3.3068	0.002372	34.28845	4.286056
TRUE	11-20-2015 18	0	79	752.7	0.4830	353.9	1.0000	792.0	77.5	1.00	29.19	0.087	63.7449	0.01226	3.3068	0.002423	35.02948	4.378685
TRUE	11-20-2015 19	0	95	897.6	0.4830	433.5	1.0000	792.0	77.5	1.00	35.76	0.087	78.0912	0.01502	3.3068	0.002968	42.91315	5.364143
TRUE	11-20-2015 20	0	98	887.7	0.4830	428.8	1.0000	792.0	77.5	1.00	35.37	0.087	77.2299	0.014854	3.3068	0.002935	42.43984	5.30498
TRUE	11-20-2015 21	0	83	843.7	0.4830	467.5	1.0000	792.0	77.5	1.00	33.61	0.087	73.4019	0.014118	3.3068	0.00279	40.33625	5.042032
TRUE	11-20-2015 22	0	58	720.9	0.3730	268.9	1.0000	792.0	77.5	1.00	28.72	0.087	62.7183	0.012063	3.3068	0.002384	34.46534	4.308167
TRUE	11-20-2015 23	0	42	678.8	0.3730	253.2	1.0000	792.0	77.5	1.00	27.04	0.087	59.0556	0.011358	3.3068	0.002245	32.45259	4.056574
TRUE	11-21-2015 00	0	24	441.3	0.0459	20.3	1.0000	792.0	77.5	0.68	17.58	0.087	38.38892	0.007383	3.3068	0.001459	21.09571	2.636964
	11-21-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-22-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-24-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-26-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-27-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-29-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-01-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-03-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-05-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-07-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-09-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-11-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-13-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-15-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-17-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-19-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (Lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-21-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-23-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-25-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-27-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-29-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2015 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-31-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2015 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
TRUE	12-31-2015 23	0	0	195.6	0.0460	9.0	1.2084	236.3	20.1	0.18	7.79	0.087	17.01302	0.003272	3.3068	0.000647	9.3491	1.168637
TRUE	01-01-2016 00	0	0	649.0	0.9931	644.5	1.0166	653.3	66.6	1.00	25.86	0.087	56.463	0.01086	3.3068	0.002146	31.02789	3.878486
TRUE	01-01-2016 01	0	0	142.3	0.9931	141.8	1.0166	143.2	14.7	0.22	5.69	0.087	12.42186	0.002389	3.3068	0.000472	6.826135	0.853267
	01-01-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-02-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-04-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-06-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-08-2016 02	0	0	179.1	0.9931	277.1	1.11E-05	1.11E-05	0.43	11.12	0.087	24.27909	0.00467	3.3068	0.000923	13.34199	1.667749	
	01-08-2016 03	0	0	649.0	0.9931	644.5	1.11E-05	1.11E-05	1.00	25.86	0.087	56.463	0.01086	3.3068	0.002146	31.02789	3.878486	
	01-08-2016 04	0	0	380.5	0.9929	377.8	1.11E-05	1.11E-05	1.00	15.16	0.087	33.1035	0.006367	3.3068	0.001258	18.19124	2.273904	
	01-08-2016 05	0	0	388.8	0.9931	386.1	1.11E-05	1.11E-05	1.00	15.49	0.087	33.8256	0.006506	3.3068	0.001286	18.58805	2.323506	
	01-08-2016 06	0	0	403.0	0.9931	400.2	1.11E-05	1.11E-05	1.00	16.06	0.087	35.061	0.006743	3.3068	0.001333	19.26693	2.408367	
	01-08-2016 07	0	0	410.6	0.9929	407.7	1.11E-05	1.11E-05	1.00	16.36	0.087	35.7222	0.006871	3.3068	0.001358	19.63028	2.453785	
	01-08-2016 08	0	0	414.7	0.9930	411.8	1.11E-05	1.11E-05	1.00	16.52	0.087	36.0789	0.006939	3.3068	0.001371	19.82629	2.478287	
	01-08-2016 09	0	0	415.0	0.9930	412.1	1.11E-05	1.11E-05	1.00	16.53	0.087	36.105	0.006944	3.3068	0.001372	19.84064	2.48008	
	01-08-2016 10	0	0	135.8	0.0427	5.8	0.0300	3.8	13.0	1.00	5.41	0.087	11.8146	0.002272	3.3068	0.000449	6.49243	0.811554
	01-08-2016 11	0	0	126.8	0.0410	5.2	0.0300	3.8	13.0	1.00	5.05	0.087	11.0316	0.002122	3.3068	0.000419	6.062151	0.757769
	01-08-2016 12	0	0	125.8	0.0413	5.2	0.0302	3.8	12.9	1.00	5.01	0.087	10.9446	0.002105	3.3068	0.000416	6.014343	0.751793
	01-08-2016 13	0	0	125.6	0.0406	5.1	0.0303	3.8	12.9	1.00	5.00	0.087	10.9272	0.002102	3.3068	0.000415	6.004781	0.750598
	01-08-2016 14	0	0	125.2	0.0407	5.1	0.0296	3.7	12.8	1.00	4.99	0.087	10.8924	0.002095	3.3068	0.000414	5.985657	0.748207
	01-08-2016 15	0	0	133.8	0.0411	5.5	0.0321	4.3	13.7	1.00	5.33	0.087	11.6406	0.002239	3.3068	0.000442	6.396813	0.799602
	01-08-2016 16	0	0	151.6	0.0462	7.0	0.0422	6.4	15.6	1.00	6.04	0.087	13.1892	0.002537	3.3068	0.000501	7.247809	0.905976
	01-08-2016 17	0	0	162.6	0.0498	8.1	0.0431	7.0	16.7	1.00	6.48	0.087	14.1462	0.002721	3.3068	0.000538	7.773705	0.971713
	01-08-2016 18	0	0	170.8	0.0509	8.7	0.0515	8.8	17.5	1.00	6.80	0.087	14.8596	0.002858	3.3068	0.000565	8.165737	1.020717
	01-08-2016 19	0	0	185.1	0.0508	9.4	0.0502	9.3	19.0	1.00	7.37	0.087	16.1037	0.003097	3.3068	0.000612	8.849402	1.106175
	01-08-2016 20	0	0	137.5	0.0451	6.2	0.0364	5.0	14.1	1.00	5.48	0.087	11.9625	0.002301	3.3068	0.000455	6.573705	0.821713
	01-08-2016 21	0	0	129.0	0.0426	5.5	0.0326	4.2	13.2	1.00	5.14	0.087	11.223	0.002159	3.3068	0.000427	6.167331	0.770916
	01-08-2016 22	0	0	129.7	0.0432	5.6	0.0324	4.2	13.3	1.00	5.17	0.087	11.2839	0.00217	3.3068	0.000429	6.200797	0.7751
	01-08-2016 23	0	0	139.6	0.0458	6.4	0.0387	5.4	14.3	1.00	5.56	0.087	12.1452	0.002336	3.3068	0.000462	6.674104	0.834263
	01-09-2016 00	0	0	139.7	0.0437	6.1	0.0344	4.8	14.3	1.00	5.57	0.087	12.1539	0.002338	3.3068	0.000462	6.678884	0.834861
	01-09-2016 01	0	0	129.5	0.0432	5.6	0.0371	4.8	13.3	1.00	5.16	0.087	11.2665	0.002167	3.3068	0.000428	6.191235	0.773904
	01-09-2016 02	0	0	149.5	0.0448	6.7	0.0401	6.0	15.3	1.00	5.96	0.087	13.0065	0.002502	3.3068	0.000494	7.14741	0.893426
	01-09-2016 03	0	0	149.8	0.0487	7.3	0.0441	6.6	15.4	1.00	5.97	0.087	13.0326	0.002507	3.3068	0.000495	7.161753	0.895219
	01-09-2016 04	0	0	150.1	0.0480	7.2	0.0420	6.3	15.4	1.00	5.98	0.087	13.0587	0.002512	3.3068	0.000496	7.176096	0.897012
	01-09-2016 05	0	0	160.0	0.0513	8.2	0.0469	7.5	16.4	1.00	6.37	0.087	13.92	0.002677	3.3068	0.000529	7.649402	0.956175
	01-09-2016 06	0	0	139.6	0.0451	6.3	0.0473	6.6	14.3	1.00	5.56	0.087	12.1452	0.002336	3.3068	0.000462	6.674104	0.834263
	01-09-2016 07	0	0	139.5	0.0452	6.3	0.0452	6.3	14.3	1.00	5.56	0.087	12.1365	0.002334	3.3068	0.000461	6.669323	0.833665
	01-09-2016 08	0	0	149.7	0.0428	6.4	0.0428	6.4	15.4	1.00	5.96	0.087	13.0239	0.002505	3.3068	0.000495	7.156972	0.894622
	01-09-2016 09	0	0	156.2	0.0429	6.7	0.0403	6.3	16.0	1.00	6.22	0.087	13.5894	0.002614	3.3068	0.000517	7.467729	0.933466
	01-09-2016 10	0	0	156.3	0.0448	7.0	0.0429	6.7	16.0	1.00	6.23	0.087	13.5981	0.002615	3.3068	0.000517	7.472751	0.934064
	01-09-2016 11	0	0	166.3	0.0481	8.0	0.0421	7.0	17.1	1.00	6.63	0.087	14.4681	0.002783	3.3068	0.00055	7.950598	0.993825
	01-09-2016 12	0	0	155.8	0.0443	6.9	0.0385	6.0	16.0	1.00	6.21	0.087	13.5546	0.002607	3.3068	0.000515	7.448606	0.931076
	01-09-2016 13	0	0	155.5	0.0418	6.5	0.0360	5.6	16.0	1.00	6.20	0.087	13.5285	0.002602	3.3068	0.000514	7.434263	0.929283
	01-09-2016 14	0	0	155.1	0.0419	6.5	0.0361	5.6	15.9	1.00	6.18	0.087	13.4937	0.002595	3.3068	0.000513	7.415139	0.926892
	01-09-2016 15	0	0	155.5	0.0412	6.4	0.0360	5.6	16.0	1.00	6.20	0.087	13.5285	0.002602	3.3068	0.000514	7.434263	0.929283
	01-09-2016 16	0	0	156.2	0.0429	6.7	0.0384	6.0	16.0	1.00	6.22	0.087	13.5894	0.002614	3.3068	0.000517	7.467729	0.933466
	01-09-2016 17	0	0	3.3	0.0443	0.1	0.0400	0.1	0.3	0.02	0.13	0.087	0.282924	5.44E-05	3.3068	1.08E-05	0.155474	0.019434
	01-09-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2016 19	0	0	55.0	0.0186	1.0	0.0040	0.2	5.6	0.73	2.19	0.087	4.788654	0.000921	3.3068	0.000182	2.63149	0.328936
	01-09-2016 20	0	0	112.6	0.0320	3.6	0.0346	3.9	11.5	1.00	4.49	0.087	9.7962	0.001884	3.3068	0.000372	5.383267	0.672908
	01-09-2016 21	0	0	122.2	0.0360	4.4	0.0368	4.5	12.5	1.00	4.87	0.087	10.6314	0.002045	3.3068	0.000404	5.842231	0.730279
	01-09-2016 22	0	0	137.3	0.0408	5.6	0.0430	5.9	14.1	1.00	5.47	0.087	11.9451	0.002297	3.3068	0.000454	6.564143	0.820518
	01-09-2016 23	0	0	154.2	0.0422	6.5	0.0422	6.5	15.8	1.00	6.14	0.087	13.4154	0.00258	3.3068	0.00051	7.372112	0.921514
	01-10-2016 00	0	0	165.3	0.0448	7.4	0.0430	7.1	17.0	1.00	6.59	0.087	14.3811	0.002766	3.3068	0.000547	7.902789	0.987849

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-10-2016 01	0	0	167.0	0.0461	7.7	0.0449	7.5	17.1	1.00	6.65	0.087	14.529	0.002794	3.3068	0.000552	7.984064	0.998008
	01-10-2016 02	0	0	135.7	0.0443	6.9	0.0437	6.8	16.0	1.00	6.20	0.087	13.5459	0.002605	3.3068	0.000515	7.443825	0.930478
	01-10-2016 03	0	0	165.1	0.0472	7.8	0.0466	7.7	16.9	1.00	6.58	0.087	14.3637	0.002763	3.3068	0.000546	7.893227	0.986653
	01-10-2016 04	0	0	164.4	0.0462	7.6	0.0468	7.7	16.9	1.00	6.55	0.087	14.3028	0.002751	3.3068	0.000544	7.859761	0.98247
	01-10-2016 05	0	0	174.5	0.0470	8.2	0.0493	8.6	17.9	1.00	6.95	0.087	15.1815	0.00292	3.3068	0.000577	8.342629	1.042829
	01-10-2016 06	0	0	164.1	0.0451	7.4	0.0488	8.0	16.8	1.00	6.54	0.087	14.2767	0.002746	3.3068	0.000543	7.845418	0.980677
	01-10-2016 07	0	0	154.9	0.0433	6.7	0.0478	7.4	15.9	1.00	6.17	0.087	13.4763	0.002592	3.3068	0.000512	7.405578	0.925697
	01-10-2016 08	0	0	113.2	0.0309	3.5	0.0300	3.4	11.6	1.00	4.51	0.087	9.8484	0.001894	3.3068	0.000374	5.411952	0.676494
	01-10-2016 09	0	0	123.6	0.0348	4.3	0.0348	4.3	12.7	1.00	4.92	0.087	10.7532	0.002068	3.3068	0.000409	5.909163	0.738645
	01-10-2016 10	0	0	164.9	0.0643	10.6	0.1104	18.2	16.9	1.00	6.57	0.087	14.3463	0.002759	3.3068	0.000545	7.883665	0.985458
	01-10-2016 11	0	16	380.5	0.3921	149.2	0.8481	322.7	39.0	1.00	15.16	0.087	33.1035	0.006367	3.3068	0.001258	18.19124	2.273904
	01-10-2016 12	0	73	818.2	0.3420	279.8	1.2015	983.1	84.0	1.00	32.60	0.087	71.1834	0.013691	3.3068	0.002706	39.11713	4.889641
	01-10-2016 13	0	99	1058.7	0.3650	386.4	1.3126	1389.6	108.6	1.00	42.18	0.087	92.1069	0.017715	3.3068	0.003501	50.61514	6.326892
	01-10-2016 14	0	106	1070.0	0.4110	439.8	1.3983	1496.2	109.8	1.00	42.63	0.087	93.09	0.017904	3.3068	0.003538	51.15538	6.394422
	01-10-2016 15	0	105	1064.7	0.4160	442.9	1.4036	1494.4	109.2	1.00	42.42	0.087	92.6289	0.017816	3.3068	0.003521	50.90199	6.362749
	01-10-2016 16	0	105	1046.4	0.4670	488.7	1.3942	1458.9	107.4	1.00	41.69	0.087	91.0368	0.017509	3.3068	0.00346	50.02709	6.253386
	01-10-2016 17	0	105	1049.0	0.4970	521.4	1.3724	1439.6	107.6	1.00	41.79	0.087	91.263	0.017553	3.3068	0.003469	50.15139	6.268924
	01-10-2016 18	0	105	1044.1	0.5110	533.5	1.3636	1423.7	107.1	1.00	41.60	0.087	90.8367	0.017471	3.3068	0.003453	49.91713	6.239641
	01-10-2016 19	0	105	1033.3	0.5190	536.3	1.3767	1422.5	106.0	1.00	41.17	0.087	89.8971	0.01729	3.3068	0.003417	49.4008	6.1751
	01-10-2016 20	0	105	1056.9	0.5140	543.2	1.3641	1441.7	108.4	1.00	42.11	0.087	91.9503	0.017685	3.3068	0.003495	50.52908	6.316135
	01-10-2016 21	0	106	1043.2	0.5160	538.3	1.3744	1433.8	107.0	1.00	41.56	0.087	90.7584	0.017456	3.3068	0.00345	49.8741	6.234263
	01-10-2016 22	0	124	1203.5	0.5020	604.2	1.3796	1660.3	123.5	1.00	47.95	0.087	104.7045	0.020138	3.3068	0.00398	57.53785	7.192231
	01-10-2016 23	0	130	1251.8	0.5100	638.4	1.3898	1739.7	128.4	1.00	49.87	0.087	108.9066	0.020946	3.3068	0.004139	59.84701	7.480876
	01-11-2016 00	0	128	1230.3	0.4920	605.3	1.3967	1718.4	126.2	1.00	49.02	0.087	107.0361	0.020587	3.3068	0.004068	58.81912	7.35239
	01-11-2016 01	0	125	1219.4	0.4980	607.3	1.3995	1706.5	125.1	1.00	48.58	0.087	106.0878	0.020404	3.3068	0.004032	58.29801	7.287251
	01-11-2016 02	0	119	1176.3	0.5170	608.1	1.3984	1644.9	120.7	1.00	46.86	0.087	102.3381	0.019683	3.3068	0.00389	56.23745	7.029681
	01-11-2016 03	0	126	1226.2	0.5080	622.9	1.4123	1731.8	125.8	1.00	48.85	0.087	106.6794	0.020518	3.3068	0.004055	58.62311	7.327888
	01-11-2016 04	0	123	1204.5	0.5190	625.1	1.4096	1697.9	123.6	1.00	47.99	0.087	104.7915	0.020155	3.3068	0.003983	57.58566	7.198207
	01-11-2016 05	0	148	1418.7	0.4960	703.7	1.4109	2001.7	145.6	1.00	56.52	0.087	123.4269	0.023739	3.3068	0.004691	67.82629	8.478287
	01-11-2016 06	0	156	1457.1	0.4870	709.6	1.4103	2055.0	149.5	1.00	58.05	0.087	126.7677	0.024382	3.3068	0.004818	69.66215	8.707769
	01-11-2016 07	0	139	1335.0	0.4680	624.8	1.4175	1892.4	137.0	1.00	53.19	0.087	116.145	0.022339	3.3068	0.004415	63.8247	7.978088
	01-11-2016 08	0	139	1337.2	0.4710	629.8	1.4104	1886.0	137.2	1.00	53.27	0.087	116.3364	0.022375	3.3068	0.004422	63.92988	7.991235
	01-11-2016 09	0	138	1336.9	0.4750	635.0	1.4117	1887.3	137.2	1.00	53.26	0.087	116.3103	0.02237	3.3068	0.004421	63.91554	7.989442
	01-11-2016 10	0	139	1336.4	0.4760	636.1	1.4101	1884.5	137.1	1.00	53.24	0.087	116.2668	0.022362	3.3068	0.004419	63.89163	7.986454
	01-11-2016 11	0	138	1333.7	0.4760	634.8	1.4111	1882.0	136.8	1.00	53.14	0.087	116.0319	0.022317	3.3068	0.00441	63.76255	7.970319
	01-11-2016 12	0	139	1342.3	0.4820	647.0	1.4063	1887.7	137.7	1.00	53.48	0.087	116.7801	0.022461	3.3068	0.004439	64.17371	8.021713
	01-11-2016 13	0	138	1351.5	0.4670	631.2	1.4067	1901.1	138.7	1.00	53.84	0.087	117.5805	0.022615	3.3068	0.004469	64.61355	8.076693
	01-11-2016 14	0	139	1352.9	0.4680	633.2	1.4100	1907.6	138.8	1.00	53.90	0.087	117.7023	0.022638	3.3068	0.004474	64.68048	8.08506
	01-11-2016 15	0	139	1346.6	0.4770	642.3	1.4221	1915.0	138.2	1.00	53.65	0.087	117.1542	0.022533	3.3068	0.004453	64.37928	8.04741
	01-11-2016 16	0	139	1344.2	0.4860	653.3	1.4295	1921.6	137.9	1.00	53.55	0.087	116.9454	0.022493	3.3068	0.004445	64.26454	8.033068
	01-11-2016 17	0	139	1347.8	0.4930	664.5	1.4323	1930.4	138.3	1.00	53.70	0.087	117.2586	0.022553	3.3068	0.004457	64.43665	8.054582
	01-11-2016 18	0	139	1306.3	0.4820	629.6	1.4330	1871.9	134.0	1.00	52.04	0.087	113.6481	0.021858	3.3068	0.00432	62.45259	7.806574
	01-11-2016 19	0	139	1289.3	0.4780	616.3	1.4475	1866.3	132.3	1.00	51.37	0.087	112.1691	0.021574	3.3068	0.004263	61.63984	7.70498
	01-11-2016 20	0	139	1290.0	0.4700	606.3	1.4698	1896.0	132.4	1.00	51.39	0.087	112.23	0.021586	3.3068	0.004266	61.67331	7.709163
	01-11-2016 21	0	140	1292.2	0.4670	603.5	1.4673	1896.1	132.6	1.00	51.48	0.087	112.4214	0.021622	3.3068	0.004273	61.77849	7.722311
	01-11-2016 22	0	139	1289.9	0.4710	607.5	1.4707	1897.0	132.3	1.00	51.39	0.087	112.2213	0.021584	3.3068	0.004265	61.66853	7.708566
	01-11-2016 23	0	140	1295.9	0.4650	602.6	1.4651	1898.6	133.0	1.00	51.63	0.087	112.7433	0.021684	3.3068	0.004285	61.95538	7.744422

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-12-2016 00	0	143	1336.6	0.4670	624.2	1.4583	1949.1	137.1	1.00	53.25	0.087	116.2842	0.022365	3.3068	0.00442	63.9012	7.987649
	01-12-2016 01	0	157	1430.0	0.4610	659.2	1.4757	2110.3	146.7	1.00	56.97	0.087	124.41	0.023928	3.3068	0.004729	68.36653	8.545817
	01-12-2016 02	0	156	1424.3	0.4590	653.8	1.4830	2112.2	146.1	1.00	56.75	0.087	123.9141	0.023833	3.3068	0.00471	68.09402	8.511753
	01-12-2016 03	0	174	1580.2	0.5040	796.4	1.4885	2352.2	162.1	1.00	62.96	0.087	137.4774	0.026442	3.3068	0.005225	75.54741	9.443426
	01-12-2016 04	0	157	1440.8	0.5140	740.6	1.4739	2123.6	147.8	1.00	57.40	0.087	125.3496	0.024109	3.3068	0.004764	68.88287	8.610359
	01-12-2016 05	0	165	1531.7	0.4740	726.0	1.4729	2256.1	157.2	1.00	61.02	0.087	133.2579	0.02563	3.3068	0.005065	73.22869	9.153586
	01-12-2016 06	0	175	1583.6	0.4960	785.5	1.4733	2333.1	162.5	1.00	63.09	0.087	137.7732	0.026498	3.3068	0.005237	75.70996	9.463745
	01-12-2016 07	0	175	1584.5	0.5060	801.8	1.4715	2331.6	162.6	1.00	63.13	0.087	137.8515	0.026514	3.3068	0.00524	75.75299	9.469124
	01-12-2016 08	0	175	1577.4	0.5050	796.6	1.4727	2323.0	161.8	1.00	62.84	0.087	137.2338	0.026395	3.3068	0.005216	75.41355	9.426693
	01-12-2016 09	0	175	1572.3	0.5090	800.3	1.4794	2326.1	161.3	1.00	62.64	0.087	136.7901	0.026309	3.3068	0.005199	75.16972	9.396215
	01-12-2016 10	0	175	1573.7	0.5130	807.3	1.4815	2331.4	161.5	1.00	62.70	0.087	136.9119	0.026333	3.3068	0.005204	75.23665	9.404582
	01-12-2016 11	0	175	1579.3	0.5100	805.4	1.4656	2314.6	162.0	1.00	62.92	0.087	137.3991	0.026427	3.3068	0.005222	75.50438	9.438048
	01-12-2016 12	0	175	1517.4	0.5410	820.9	1.4939	2266.9	155.7	1.00	60.45	0.087	132.0138	0.025391	3.3068	0.005018	72.54502	9.068127
	01-12-2016 13	0	175	1531.3	0.5350	819.2	1.5338	2348.7	157.1	1.00	61.01	0.087	133.2231	0.025623	3.3068	0.005064	73.20956	9.151195
	01-12-2016 14	0	175	1515.9	0.5490	832.2	1.5476	2346.0	155.5	1.00	60.39	0.087	131.8833	0.025366	3.3068	0.005013	72.47331	9.059163
	01-12-2016 15	0	175	1502.6	0.5470	821.9	1.5375	2310.2	154.2	1.00	59.86	0.087	130.7262	0.025143	3.3068	0.004969	71.83745	8.979681
	01-12-2016 16	0	161	1415.8	0.5560	787.2	1.5233	2156.7	145.3	1.00	56.41	0.087	123.1746	0.023691	3.3068	0.004682	67.68765	8.460956
	01-12-2016 17	0	151	1336.3	0.5270	704.2	1.5283	2042.3	137.1	1.00	53.24	0.087	116.2581	0.02236	3.3068	0.004419	63.88685	7.985857
	01-12-2016 18	0	170	1478.7	0.5310	785.2	1.5485	2289.7	151.7	1.00	58.91	0.087	128.6469	0.024743	3.3068	0.00489	70.69482	8.836853
	01-12-2016 19	0	171	1494.2	0.5280	788.9	1.5403	2301.5	153.3	1.00	59.53	0.087	129.9954	0.025003	3.3068	0.004941	71.43586	8.929482
	01-12-2016 20	0	175	1503.9	0.5370	807.6	1.5565	2340.8	154.3	1.00	59.92	0.087	130.8393	0.025165	3.3068	0.004973	71.8996	8.98745
	01-12-2016 21	0	175	1510.1	0.5360	809.4	1.5528	2344.9	154.9	1.00	60.16	0.087	131.3787	0.025269	3.3068	0.004994	72.19602	9.024502
	01-12-2016 22	0	175	1513.4	0.5370	812.7	1.5531	2350.5	155.3	1.00	60.29	0.087	131.6658	0.025324	3.3068	0.005004	72.35378	9.044223
	01-12-2016 23	0	175	1499.5	0.5420	812.7	1.5651	2346.9	153.8	1.00	59.74	0.087	130.4565	0.025091	3.3068	0.004959	71.68924	8.961155
	01-13-2016 00	0	175	1505.2	0.5440	818.8	1.5594	2347.2	154.4	1.00	59.97	0.087	130.9524	0.025187	3.3068	0.004977	71.96175	8.995219
	01-13-2016 01	0	175	1505.9	0.5400	813.2	1.5594	2348.3	154.5	1.00	60.00	0.087	131.0133	0.025198	3.3068	0.00498	71.99522	8.999402
	01-13-2016 02	0	173	1482.5	0.5430	805.0	1.5748	2334.7	152.1	1.00	59.06	0.087	128.9775	0.024807	3.3068	0.004902	70.87649	8.859562
	01-13-2016 03	0	173	1497.9	0.5320	796.9	1.5640	2342.7	153.7	1.00	59.68	0.087	130.3173	0.025064	3.3068	0.004953	71.61275	8.951594
	01-13-2016 04	0	173	1486.8	0.5360	796.9	1.5761	2343.4	152.5	1.00	59.24	0.087	129.3516	0.024879	3.3068	0.004917	71.08207	8.885259
	01-13-2016 05	0	173	1487.3	0.5290	786.8	1.5625	2323.9	152.6	1.00	59.25	0.087	129.3951	0.024887	3.3068	0.004918	71.10598	8.888247
	01-13-2016 06	0	172	1483.8	0.5310	787.9	1.5700	2329.6	152.2	1.00	59.12	0.087	129.0906	0.024829	3.3068	0.004907	70.93865	8.867331
	01-13-2016 07	0	173	1499.7	0.5290	793.3	1.5672	2350.4	153.9	1.00	59.75	0.087	130.4739	0.025095	3.3068	0.004959	71.6988	8.962351
	01-13-2016 08	0	173	1496.6	0.5320	796.2	1.5750	2357.1	153.6	1.00	59.63	0.087	130.2042	0.025043	3.3068	0.004949	71.5506	8.943825
	01-13-2016 09	0	173	1497.4	0.5340	799.6	1.5726	2354.8	153.6	1.00	59.66	0.087	130.2738	0.025056	3.3068	0.004952	71.58884	8.948606
	01-13-2016 10	0	173	1489.8	0.5420	807.5	1.5550	2316.7	152.9	1.00	59.35	0.087	129.6126	0.024929	3.3068	0.004926	71.2255	8.903187
	01-13-2016 11	0	173	1486.8	0.5410	804.4	1.5538	2310.2	152.5	1.00	59.24	0.087	129.3516	0.024879	3.3068	0.004917	71.08207	8.885259
	01-13-2016 12	0	173	1497.3	0.5370	804.1	1.5555	2329.1	153.6	1.00	59.65	0.087	130.2651	0.025054	3.3068	0.004951	71.58406	8.948008
	01-13-2016 13	0	173	1494.7	0.5350	799.7	1.5661	2340.8	153.4	1.00	59.55	0.087	130.0389	0.025011	3.3068	0.004943	71.45976	8.93247
	01-13-2016 14	0	174	1492.9	0.5380	803.2	1.5753	2351.7	153.2	1.00	59.48	0.087	129.8823	0.024981	3.3068	0.004937	71.37371	8.921713
	01-13-2016 15	0	175	1493.9	0.5350	799.2	1.5831	2365.0	153.3	1.00	59.52	0.087	129.9693	0.024998	3.3068	0.00494	71.42151	8.927689
	01-13-2016 16	0	172	1487.6	0.5380	800.3	1.5753	2343.4	152.6	1.00	59.27	0.087	129.4212	0.024892	3.3068	0.004919	71.12032	8.89004
	01-13-2016 17	0	159	1385.4	0.5360	742.6	1.5773	2185.2	142.1	1.00	55.20	0.087	120.5298	0.023182	3.3068	0.004581	66.23426	8.279283
	01-13-2016 18	0	174	1495.7	0.5270	788.2	1.5968	2388.3	153.5	1.00	59.59	0.087	130.1259	0.025028	3.3068	0.004946	71.50757	8.938446
	01-13-2016 19	0	174	1502.1	0.5330	800.6	1.5982	2400.7	154.1	1.00	59.84	0.087	130.6827	0.025135	3.3068	0.004967	71.81355	8.976693
	01-13-2016 20	0	175	1503.7	0.5270	792.4	1.5944	2397.5	154.3	1.00	59.91	0.087	130.8219	0.025162	3.3068	0.004972	71.89004	8.986255
	01-13-2016 21	0	175	1504.4	0.5280	794.3	1.5891	2390.6	154.4	1.00	59.94	0.087	130.8828	0.025173	3.3068	0.004975	71.92351	8.990438
	01-13-2016 22	0	166	1437.0	0.5400	776.0	1.5885	2282.7	147.4	1.00	57.25	0.087	125.019	0.024045	3.3068	0.004752	68.7012	8.587649

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Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Subscription Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-13-2016 23	0	154	1343.2	0.5210	699.8	1.5987	2147.4	137.8	1.00	53.51	0.087	116.8584	0.022476	3.3068	0.004442	64.21673	8.027092
	01-14-2016 00	0	149	1311.5	0.5230	685.9	1.6178	2121.8	134.6	1.00	52.25	0.087	114.1005	0.021945	3.3068	0.004337	62.7012	7.837649
	01-14-2016 01	0	119	1073.3	0.5760	618.2	1.6093	1727.3	110.1	1.00	42.76	0.087	93.3771	0.01796	3.3068	0.003549	51.31315	6.414143
	01-14-2016 02	0	107	986.3	0.5870	579.0	1.6131	1591.0	101.2	1.00	39.29	0.087	85.8081	0.016504	3.3068	0.003261	47.15378	5.894223
	01-14-2016 03	0	143	1259.7	0.5410	681.5	1.6236	2045.2	129.2	1.00	50.19	0.087	109.5939	0.021079	3.3068	0.004166	60.2247	7.528088
	01-14-2016 04	0	147	1281.8	0.5470	701.1	1.6270	2085.5	131.5	1.00	51.07	0.087	111.5166	0.021448	3.3068	0.004239	61.28127	7.660159
	01-14-2016 05	0	147	1300.7	0.5220	679.0	1.6141	2099.4	133.4	1.00	51.82	0.087	113.1609	0.021765	3.3068	0.004301	62.18486	7.773108
	01-14-2016 06	0	161	1393.4	0.5280	735.7	1.6309	2272.5	143.0	1.00	55.51	0.087	121.2258	0.023316	3.3068	0.004608	66.61673	8.327092
	01-14-2016 07	0	160	1375.9	0.5270	725.1	1.6352	2249.9	141.2	1.00	54.82	0.087	119.7033	0.023023	3.3068	0.00455	65.78008	8.22251
	01-14-2016 08	0	156	1351.6	0.5270	712.3	1.6150	2182.9	138.7	1.00	53.85	0.087	117.5892	0.022616	3.3068	0.004469	64.61833	8.077291
	01-14-2016 09	0	155	1338.6	0.5200	696.1	1.6160	2163.2	137.3	1.00	53.33	0.087	116.4582	0.022399	3.3068	0.004426	63.99681	7.999602
	01-14-2016 10	0	148	1290.4	0.5100	658.1	1.6114	2079.3	132.4	1.00	51.41	0.087	112.2648	0.021592	3.3068	0.004267	61.69243	7.711554
	01-14-2016 11	0	140	1231.0	0.5130	631.5	1.6163	1989.7	126.3	1.00	49.04	0.087	107.097	0.020598	3.3068	0.004071	58.85259	7.356574
	01-14-2016 12	0	158	1375.9	0.5320	732.0	1.6132	2219.6	141.2	1.00	54.82	0.087	119.7033	0.023023	3.3068	0.00455	65.78008	8.22251
	01-14-2016 13	0	142	1241.9	0.5210	647.0	1.6150	2005.7	127.4	1.00	49.48	0.087	108.0453	0.020781	3.3068	0.004107	59.37371	7.421713
	01-14-2016 14	0	144	1259.6	0.5130	646.2	1.6111	2029.4	129.2	1.00	50.18	0.087	109.5852	0.021077	3.3068	0.004165	60.21992	7.52749
	01-14-2016 15	0	145	1270.8	0.5260	668.4	1.6062	2041.2	130.4	1.00	50.63	0.087	110.5596	0.021264	3.3068	0.004202	60.75538	7.594422
	01-14-2016 16	0	150	1301.3	0.5330	693.6	1.6157	2102.5	133.5	1.00	51.84	0.087	113.2131	0.021775	3.3068	0.004303	62.21355	7.776693
	01-14-2016 17	0	154	1348.9	0.5390	727.1	1.6112	2173.3	138.4	1.00	53.74	0.087	117.3543	0.022571	3.3068	0.004461	64.48924	8.061155
	01-14-2016 18	0	151	1311.1	0.5570	730.3	1.6036	2102.5	134.5	1.00	52.24	0.087	114.0657	0.021939	3.3068	0.004336	62.68207	7.835259
	01-14-2016 19	0	143	1254.5	0.5300	664.9	1.6277	2042.0	128.7	1.00	49.98	0.087	109.1415	0.020992	3.3068	0.004148	59.9761	7.497012
	01-14-2016 20	0	146	1267.6	0.5470	693.4	1.6339	2071.1	130.1	1.00	50.50	0.087	110.2812	0.021211	3.3068	0.004192	60.60239	7.575299
	01-14-2016 21	0	142	1255.5	0.5230	656.6	1.6358	2053.7	128.8	1.00	50.02	0.087	109.2285	0.021008	3.3068	0.004152	60.0239	7.502988
	01-14-2016 22	0	143	1260.4	0.5360	675.6	1.6594	2091.5	129.3	1.00	50.22	0.087	109.6548	0.02109	3.3068	0.004168	60.25817	7.532271
	01-14-2016 23	0	145	1267.7	0.5440	689.6	1.6477	2088.8	130.1	1.00	50.51	0.087	110.2899	0.021213	3.3068	0.004192	60.60717	7.575896
	01-15-2016 00	0	121	1063.0	0.4810	511.3	1.6713	1776.6	109.1	1.00	42.35	0.087	92.481	0.017787	3.3068	0.003515	50.82072	6.35259
	01-15-2016 01	0	78	713.6	0.4299	306.8	1.4686	1048.0	73.2	1.00	28.43	0.087	62.0832	0.011941	3.3068	0.00236	34.11633	4.264542
	01-15-2016 02	0	4	61.3	0.4290	26.3	1.0044	61.5	6.3	0.17	2.44	0.087	5.330316	0.001025	3.3068	0.000203	2.929147	0.366143
	01-15-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-15-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2016 16	0	0	14.9	0.0000	0.0	0.0000	0.0	1.5	0.77	0.59	0.087	1.292907	0.000249	3.3068	4.91E-05	0.710486	0.088811
	01-16-2016 17	0	0	12.7	0.0000	0.0	0.0000	0.0	1.3	1.00	0.51	0.087	1.1049	0.000213	3.3068	4.2E-05	0.607171	0.075896
	01-16-2016 18	0	0	14.3	0.0000	0.0	0.0000	0.0	1.5	1.00	0.57	0.087	1.2441	0.000239	3.3068	4.73E-05	0.683665	0.085458
	01-16-2016 19	0	0	91.1	0.0252	2.3	0.0000	0.0	9.3	1.00	3.63	0.087	7.9257	0.001524	3.3068	0.000301	4.355378	0.544422
	01-16-2016 20	0	0	99.1	0.0323	3.2	0.0151	1.5	10.2	1.00	3.95	0.087	8.6217	0.001658	3.3068	0.000328	4.737849	0.592231
	01-16-2016 21	0	0	109.0	0.0339	3.7	0.0220	2.4	11.2	1.00	4.34	0.087	9.483	0.001824	3.3068	0.00036	5.211155	0.651394
	01-16-2016 22	0	0	113.9	0.0351	4.0	0.0246	2.8	11.7	1.00	4.54	0.087	9.9093	0.001906	3.3068	0.000377	5.445418	0.680677
	01-16-2016 23	0	0	146.9	0.0442	6.5	0.0361	5.3	15.1	1.00	5.85	0.087	12.7803	0.002458	3.3068	0.000486	7.023108	0.877888
	01-17-2016 00	0	0	148.6	0.0458	6.8	0.0357	5.3	15.2	1.00	5.92	0.087	12.9282	0.002487	3.3068	0.000491	7.104382	0.888048
	01-17-2016 01	0	0	150.3	0.0479	7.2	0.0339	5.1	15.4	1.00	5.99	0.087	13.0761	0.002515	3.3068	0.000497	7.185657	0.898207
	01-17-2016 02	0	0	188.5	0.0562	10.6	0.0599	11.3	19.3	1.00	7.51	0.087	16.3995	0.003154	3.3068	0.000623	9.011952	1.126494
	01-17-2016 03	0	0	196.3	0.0530	10.4	0.0448	8.8	20.1	1.00	7.82	0.087	17.0781	0.003285	3.3068	0.000649	9.384861	1.173108
	01-17-2016 04	0	0	176.5	0.0482	8.5	0.0431	7.6	18.1	1.00	7.03	0.087	15.3555	0.002953	3.3068	0.000584	8.438247	1.054781
	01-17-2016 05	0	0	187.9	0.0511	9.6	0.0420	7.9	19.3	1.00	7.49	0.087	16.3473	0.003144	3.3068	0.000621	8.983267	1.122908
	01-17-2016 06	0	0	177.3	0.0491	8.7	0.0412	7.3	18.2	1.00	7.06	0.087	15.4251	0.002967	3.3068	0.000586	8.476494	1.059562
	01-17-2016 07	0	0	177.5	0.0479	8.5	0.0411	7.3	18.2	1.00	7.07	0.087	15.4425	0.00297	3.3068	0.000587	8.485056	1.060757
	01-17-2016 08	0	0	178.1	0.0477	8.5	0.0410	7.3	18.3	1.00	7.10	0.087	15.4947	0.00298	3.3068	0.000589	8.514741	1.064343
	01-17-2016 09	0	0	189.2	0.0539	10.2	0.0423	8.0	19.4	1.00	7.54	0.087	16.4604	0.003166	3.3068	0.000626	9.045418	1.130677
	01-17-2016 10	0	5	249.9	0.1421	35.5	0.3818	95.4	25.6	1.00	9.96	0.087	21.7413	0.004182	3.3068	0.000826	11.94741	1.493426
	01-17-2016 11	0	38	574.9	0.4810	276.5	1.2508	719.1	59.0	1.00	22.90	0.087	50.0163	0.00962	3.3068	0.001901	27.48526	3.435657
	01-17-2016 12	0	91	962.1	0.4080	392.5	1.5497	1491.0	98.7	1.00	38.33	0.087	83.7027	0.016099	3.3068	0.003181	45.99681	5.749602
	01-17-2016 13	0	125	1237.8	0.4190	518.6	1.6401	2030.1	127.0	1.00	49.31	0.087	107.6886	0.020712	3.3068	0.004093	59.17769	7.397211
	01-17-2016 14	0	165	1497.0	0.5380	805.4	1.6533	2475.0	153.6	1.00	59.64	0.087	130.239	0.025049	3.3068	0.00495	71.56972	8.946215
	01-17-2016 15	0	159	1440.5	0.5430	782.2	1.6514	2378.9	147.8	1.00	57.39	0.087	125.3235	0.024104	3.3068	0.004763	68.86853	8.608566
	01-17-2016 16	0	159	1451.4	0.5370	779.4	1.6430	2384.7	148.9	1.00	57.82	0.087	126.2718	0.024286	3.3068	0.004799	69.38964	8.673705
	01-17-2016 17	0	171	1540.3	0.5220	804.0	1.6676	2568.6	158.0	1.00	61.37	0.087	134.0061	0.025774	3.3068	0.005093	73.63984	9.20498
	01-17-2016 18	0	174	1551.7	0.5250	814.6	1.6786	2604.7	159.2	1.00	61.82	0.087	134.9979	0.025965	3.3068	0.005131	74.18486	9.273108
	01-17-2016 19	0	174	1558.5	0.5050	787.0	1.6823	2621.9	159.9	1.00	62.09	0.087	135.5895	0.026078	3.3068	0.005154	74.50996	9.313745
	01-17-2016 20	0	174	1554.3	0.4950	769.4	1.6894	2625.8	159.5	1.00	61.92	0.087	135.2241	0.026008	3.3068	0.00514	74.30916	9.288645

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	01-17-2016 21	0	174	1554.4	0.4940	767.9	1.6827	2615.6	159.5	1.00	61.93	0.087	135.2328	0.02601	3.3068	0.00514	74.31394	9.289243
	01-17-2016 22	0	174	1554.0	0.4970	772.3	1.6766	2605.5	159.4	1.00	61.91	0.087	135.198	0.026003	3.3068	0.005139	74.29482	9.286853
	01-17-2016 23	0	174	1559.6	0.4990	778.2	1.6598	2588.7	160.0	1.00	62.14	0.087	135.6852	0.026097	3.3068	0.005157	74.56255	9.320319
	01-18-2016 00	0	159	1456.9	0.4940	719.7	1.6506	2404.8	149.5	1.00	58.04	0.087	126.7503	0.024378	3.3068	0.004818	69.65259	8.706574
	01-18-2016 01	0	170	1534.4	0.4820	739.6	1.6464	2526.3	157.4	1.00	61.13	0.087	133.4928	0.025675	3.3068	0.005074	73.35777	9.169721
	01-18-2016 02	0	169	1539.4	0.4840	745.1	1.6434	2529.8	157.9	1.00	61.33	0.087	133.9278	0.025759	3.3068	0.00509	73.59681	9.199602
	01-18-2016 03	0	170	1559.1	0.4790	746.8	1.6264	2535.7	160.0	1.00	62.12	0.087	135.6417	0.026089	3.3068	0.005156	74.53865	9.317331
	01-18-2016 04	0	170	1542.9	0.4860	749.8	1.6354	2523.2	158.3	1.00	61.47	0.087	134.2323	0.025817	3.3068	0.005102	73.76414	9.220518
	01-18-2016 05	0	170	1544.7	0.4890	755.4	1.6290	2516.3	158.5	1.00	61.54	0.087	134.3889	0.025848	3.3068	0.005108	73.8502	9.231275
	01-18-2016 06	0	170	1543.0	0.4880	753.0	1.6505	2546.7	158.3	1.00	61.47	0.087	134.241	0.025819	3.3068	0.005102	73.76892	9.221116
	01-18-2016 07	0	170	1554.3	0.4930	766.3	1.6505	2565.4	159.5	1.00	61.92	0.087	135.2241	0.026008	3.3068	0.00514	74.30916	9.288645
	01-18-2016 08	0	171	1555.4	0.4880	759.0	1.6508	2567.7	159.6	1.00	61.97	0.087	135.3198	0.026027	3.3068	0.005143	74.36175	9.295219
	01-18-2016 09	0	173	1569.9	0.4810	755.1	1.6548	2597.9	161.1	1.00	62.55	0.087	136.5813	0.026269	3.3068	0.005191	75.05498	9.381873
	01-18-2016 10	0	175	1596.4	0.4800	766.3	1.6414	2620.3	163.8	1.00	63.60	0.087	138.8868	0.026713	3.3068	0.005279	76.32191	9.540239
	01-18-2016 11	0	174	1574.1	0.4890	769.7	1.6468	2592.2	161.5	1.00	62.71	0.087	136.9467	0.02634	3.3068	0.005205	75.25578	9.406972
	01-18-2016 12	0	172	1569.6	0.4810	755.0	1.6330	2563.1	161.0	1.00	62.53	0.087	136.5552	0.026264	3.3068	0.00519	75.04064	9.38008
	01-18-2016 13	0	172	1568.1	0.4740	743.3	1.6283	2553.4	160.9	1.00	62.47	0.087	136.4247	0.026239	3.3068	0.005185	74.96892	9.371116
	01-18-2016 14	0	174	1584.7	0.4670	740.1	1.6218	2570.1	162.6	1.00	63.14	0.087	137.8689	0.026517	3.3068	0.00524	75.76255	9.470319
	01-18-2016 15	0	173	1586.7	0.4730	750.5	1.6168	2565.4	162.8	1.00	63.22	0.087	138.0429	0.02655	3.3068	0.005247	75.85817	9.482271
	01-18-2016 16	0	172	1570.5	0.4790	752.3	1.6148	2536.1	161.1	1.00	62.57	0.087	136.6335	0.026279	3.3068	0.005193	75.08367	9.385458
	01-18-2016 17	0	170	1561.0	0.4870	760.2	1.6108	2514.5	160.2	1.00	62.19	0.087	135.807	0.02612	3.3068	0.005162	74.62948	9.328585
	01-18-2016 18	0	169	1530.2	0.5010	766.6	1.6244	2485.7	157.0	1.00	60.96	0.087	133.1274	0.025605	3.3068	0.00506	73.15697	9.144622
	01-18-2016 19	0	168	1471.2	0.4980	732.7	1.6349	2405.3	150.9	1.00	58.61	0.087	127.9944	0.024618	3.3068	0.004865	70.33625	8.792032
	01-18-2016 20	0	168	1487.3	0.4850	721.3	1.6341	2430.4	152.6	1.00	59.25	0.087	129.3951	0.024887	3.3068	0.004918	71.10598	8.888247
	01-18-2016 21	0	169	1491.6	0.4840	721.9	1.6419	2449.1	153.0	1.00	59.43	0.087	129.7692	0.024959	3.3068	0.004932	71.31155	8.913944
	01-18-2016 22	0	168	1497.2	0.4740	709.7	1.6398	2455.1	153.6	1.00	59.65	0.087	130.2564	0.025053	3.3068	0.004951	71.57928	8.94741
	01-18-2016 23	0	168	1488.9	0.4780	711.7	1.6499	2456.6	152.8	1.00	59.32	0.087	129.5343	0.024914	3.3068	0.004923	71.18247	8.897809
	01-19-2016 00	0	166	1468.0	0.5000	734.0	1.6545	2428.8	150.6	1.00	58.49	0.087	127.716	0.024564	3.3068	0.004854	70.18327	8.772908
	01-19-2016 01	0	167	1482.9	0.4900	726.6	1.6491	2445.5	152.2	1.00	59.08	0.087	129.0123	0.024813	3.3068	0.004904	70.89562	8.861952
	01-19-2016 02	0	166	1460.1	0.4890	714.0	1.6603	2424.2	149.8	1.00	58.17	0.087	127.0287	0.024432	3.3068	0.004828	69.80558	8.725697
	01-19-2016 03	0	166	1467.6	0.4580	672.2	1.6546	2428.3	150.6	1.00	58.47	0.087	127.6812	0.024557	3.3068	0.004853	70.16414	8.770518
	01-19-2016 04	0	165	1469.6	0.4600	676.0	1.6520	2427.8	150.8	1.00	58.55	0.087	127.8552	0.024591	3.3068	0.00486	70.25976	8.78247
	01-19-2016 05	0	166	1470.3	0.4790	704.3	1.6459	2419.9	150.9	1.00	58.58	0.087	127.9161	0.024603	3.3068	0.004862	70.29323	8.786653
	01-19-2016 06	0	167	1475.4	0.4790	706.7	1.6550	2441.8	151.4	1.00	58.78	0.087	128.3598	0.024688	3.3068	0.004879	70.53705	8.817131
	01-19-2016 07	0	165	1458.9	0.4860	709.0	1.6643	2428.0	149.7	1.00	58.12	0.087	126.9243	0.024412	3.3068	0.004824	69.74821	8.718526
	01-19-2016 08	0	165	1455.4	0.4820	701.5	1.6690	2429.1	149.3	1.00	57.98	0.087	126.6198	0.024353	3.3068	0.004813	69.58088	8.69761
	01-19-2016 09	0	164	1443.9	0.4770	688.7	1.6658	2405.2	148.1	1.00	57.53	0.087	125.6193	0.024161	3.3068	0.004775	69.03108	8.628884
	01-19-2016 10	0	164	1449.8	0.4720	684.3	1.6653	2414.3	148.8	1.00	57.76	0.087	126.1326	0.02426	3.3068	0.004794	69.31315	8.664143
	01-19-2016 11	0	166	1472.0	0.4690	690.4	1.6600	2443.5	151.0	1.00	58.65	0.087	128.064	0.024631	3.3068	0.004868	70.3745	8.796813
	01-19-2016 12	0	168	1474.0	0.4660	686.9	1.6632	2451.6	151.2	1.00	58.73	0.087	128.238	0.024665	3.3068	0.004874	70.47012	8.808765
	01-19-2016 13	0	166	1457.6	0.4860	708.4	1.6709	2435.5	149.6	1.00	58.07	0.087	126.8112	0.02439	3.3068	0.00482	69.68606	8.710757
	01-19-2016 14	0	158	1386.2	0.4980	690.3	1.6563	2296.0	142.2	1.00	55.23	0.087	120.5994	0.023195	3.3068	0.004584	66.27251	8.284064
	01-19-2016 15	0	155	1354.0	0.4630	626.9	1.6730	2265.2	138.9	1.00	53.94	0.087	117.798	0.022657	3.3068	0.004477	64.73307	8.091633
	01-19-2016 16	0	152	1311.3	0.4660	611.1	1.6998	2229.0	134.5	1.00	52.24	0.087	114.0831	0.021942	3.3068	0.004336	62.69163	7.836454
	01-19-2016 17	0	150	1313.9	0.4700	617.5	1.6848	2213.6	134.8	1.00	52.35	0.087	114.3093	0.021986	3.3068	0.004345	62.81594	7.851992
	01-19-2016 18	0	150	1301.4	0.4900	637.7	1.6896	2198.8	133.5	1.00	51.85	0.087	113.2218	0.021776	3.3068	0.004303	62.21833	7.777291
	01-19-2016 19	0	150	1311.4	0.5040	660.9	1.6770	2199.2	134.5	1.00	52.25	0.087	114.0918	0.021944	3.3068	0.004337	62.69641	7.837052

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-19-2016 20	0	152	1319.4	0.5030	663.7	1.6840	2221.9	135.4	1.00	52.57	0.087	114.7878	0.022078	3.3068	0.004363	63.07888	7.884861
	01-19-2016 21	0	157	1370.3	0.4800	657.7	1.6808	2303.2	140.6	1.00	54.59	0.087	119.2161	0.022929	3.3068	0.004531	65.51235	8.189044
	01-19-2016 22	0	163	1408.5	0.4870	685.9	1.7032	2398.9	144.5	1.00	56.12	0.087	122.5395	0.023569	3.3068	0.004658	67.33865	8.417331
	01-19-2016 23	0	163	1425.8	0.5160	735.7	1.6992	2422.7	146.3	1.00	56.80	0.087	124.0446	0.023858	3.3068	0.004715	68.16574	8.520717
	01-20-2016 00	0	163	1422.6	0.5310	755.4	1.7087	2430.8	146.0	1.00	56.68	0.087	123.7662	0.023804	3.3068	0.004704	68.01275	8.501594
	01-20-2016 01	0	163	1419.4	0.5460	775.0	1.7090	2425.8	145.6	1.00	56.55	0.087	123.4878	0.023751	3.3068	0.004694	67.85976	8.48247
	01-20-2016 02	0	164	1427.9	0.5530	789.6	1.7017	2429.8	146.5	1.00	56.89	0.087	124.2273	0.023893	3.3068	0.004722	68.26614	8.533267
	01-20-2016 03	0	163	1423.0	0.5500	782.7	1.7025	2422.7	146.0	1.00	56.69	0.087	123.801	0.023811	3.3068	0.004706	68.03187	8.503984
	01-20-2016 04	0	165	1436.6	0.5310	762.8	1.7106	2457.4	147.4	1.00	57.24	0.087	124.9842	0.024039	3.3068	0.004751	68.68207	8.585259
	01-20-2016 05	0	165	1452.1	0.5210	756.5	1.6898	2453.7	149.0	1.00	57.85	0.087	126.3327	0.024298	3.3068	0.004802	69.42311	8.677888
	01-20-2016 06	0	166	1453.0	0.5250	762.8	1.7065	2479.5	149.1	1.00	57.89	0.087	126.411	0.024313	3.3068	0.004805	69.46614	8.683267
	01-20-2016 07	0	165	1452.1	0.5350	776.9	1.7093	2482.1	149.0	1.00	57.85	0.087	126.3327	0.024298	3.3068	0.004802	69.42311	8.677888
	01-20-2016 08	0	170	1475.2	0.5260	776.0	1.7029	2512.1	151.4	1.00	58.77	0.087	128.3424	0.024685	3.3068	0.004878	70.52749	8.815936
	01-20-2016 09	0	171	1488.5	0.5070	754.7	1.7026	2534.3	152.7	1.00	59.30	0.087	129.4995	0.024907	3.3068	0.004922	71.16335	8.895418
TRUE	01-20-2016 10	0	171	1494.5	0.9930	1484.0	1.6902	2526.0	153.3	1.00	59.54	0.087	130.0215	0.025008	3.3068	0.004942	71.4502	8.931275
	01-20-2016 11	0	171	1491.6	0.5280	787.6	1.6943	2527.2	153.0	1.00	59.43	0.087	129.7692	0.024959	3.3068	0.004932	71.31155	8.913944
	01-20-2016 12	0	171	1490.8	0.5270	785.7	1.7049	2541.7	153.0	1.00	59.39	0.087	129.6996	0.024946	3.3068	0.00493	71.27331	8.909163
	01-20-2016 13	0	171	1491.9	0.5250	783.2	1.6978	2533.0	153.1	1.00	59.44	0.087	129.7953	0.024964	3.3068	0.004933	71.3259	8.915737
	01-20-2016 14	0	171	1492.2	0.5540	826.7	1.6893	2520.7	153.1	1.00	59.45	0.087	129.8214	0.024969	3.3068	0.004934	71.34024	8.91753
	01-20-2016 15	0	171	1481.7	0.5630	834.2	1.6934	2509.1	152.0	1.00	59.03	0.087	128.9079	0.024793	3.3068	0.0049	70.83825	8.854781
	01-20-2016 16	0	171	1479.8	0.5610	830.2	1.6937	2506.3	151.8	1.00	58.96	0.087	128.7426	0.024762	3.3068	0.004893	70.74741	8.843426
	01-20-2016 17	0	170	1479.8	0.5620	831.6	1.6940	2506.8	151.8	1.00	58.96	0.087	128.7426	0.024762	3.3068	0.004893	70.74741	8.843426
	01-20-2016 18	0	158	1390.1	0.5700	792.4	1.6854	2342.9	142.6	1.00	55.38	0.087	120.9387	0.023261	3.3068	0.004597	66.45896	8.307371
	01-20-2016 19	0	169	1465.5	0.5270	772.3	1.6950	2484.0	150.4	1.00	58.39	0.087	127.4985	0.024522	3.3068	0.004846	70.06375	8.757968
	01-20-2016 20	0	170	1472.0	0.5180	762.5	1.6924	2491.2	151.0	1.00	58.65	0.087	128.064	0.024631	3.3068	0.004868	70.3745	8.796813
	01-20-2016 21	0	170	1474.8	0.5140	758.0	1.6927	2496.4	151.3	1.00	58.76	0.087	128.3076	0.024678	3.3068	0.004877	70.50837	8.813546
	01-20-2016 22	0	171	1480.7	0.5140	761.1	1.6991	2515.8	151.9	1.00	58.99	0.087	128.8209	0.024777	3.3068	0.004896	70.79044	8.848805
	01-20-2016 23	0	171	1476.8	0.5170	763.5	1.7081	2522.5	151.5	1.00	58.84	0.087	128.4816	0.024711	3.3068	0.004883	70.60398	8.825498
	01-21-2016 00	0	171	1480.9	0.5180	767.1	1.7106	2533.3	151.9	1.00	59.00	0.087	128.8383	0.02478	3.3068	0.004897	70.8	8.85
	01-21-2016 01	0	169	1470.8	0.5170	760.4	1.7038	2505.9	150.9	1.00	58.60	0.087	127.9596	0.024611	3.3068	0.004864	70.31713	8.789641
	01-21-2016 02	0	168	1454.6	0.5170	752.0	1.7064	2482.1	149.2	1.00	57.95	0.087	126.5502	0.02434	3.3068	0.00481	69.54263	8.692829
	01-21-2016 03	0	167	1446.0	0.5230	756.3	1.7031	2462.7	148.4	1.00	57.61	0.087	125.802	0.024196	3.3068	0.004782	69.13147	8.641434
	01-21-2016 04	0	163	1394.7	0.5290	737.8	1.6852	2350.3	143.1	1.00	55.57	0.087	121.3389	0.023338	3.3068	0.004612	66.67888	8.334861
	01-21-2016 05	0	169	1462.8	0.4950	724.1	1.6922	2475.3	150.1	1.00	58.28	0.087	127.2636	0.024477	3.3068	0.004837	69.93466	8.741833
	01-21-2016 06	0	167	1443.9	0.5030	726.3	1.7025	2458.3	148.1	1.00	57.53	0.087	125.6193	0.024161	3.3068	0.004775	69.03108	8.628884
	01-21-2016 07	0	166	1440.2	0.4980	717.2	1.6980	2445.4	147.8	1.00	57.38	0.087	125.2974	0.024099	3.3068	0.004762	68.85418	8.606773
	01-21-2016 08	0	165	1426.0	0.5030	717.3	1.7084	2436.2	146.3	1.00	56.81	0.087	124.062	0.023861	3.3068	0.004715	68.1753	8.521912
	01-21-2016 09	0	166	1438.4	0.4950	712.0	1.6981	2442.6	147.6	1.00	57.31	0.087	125.1408	0.024069	3.3068	0.004756	68.76813	8.596016
	01-21-2016 10	0	165	1436.0	0.4970	713.7	1.6947	2433.6	147.3	1.00	57.21	0.087	124.932	0.024029	3.3068	0.004749	68.65339	8.581673
	01-21-2016 11	0	165	1419.6	0.5020	712.6	1.7058	2421.6	145.7	1.00	56.56	0.087	123.5052	0.023754	3.3068	0.004694	67.86932	8.483665
	01-21-2016 12	0	165	1426.6	0.4940	704.7	1.7026	2429.0	146.4	1.00	56.84	0.087	124.1142	0.023871	3.3068	0.004717	68.20398	8.525498
	01-21-2016 13	0	164	1409.3	0.4930	694.8	1.7263	2432.9	144.6	1.00	56.15	0.087	122.6091	0.023582	3.3068	0.00466	67.37689	8.422112
	01-21-2016 14	0	164	1423.7	0.4910	699.0	1.7248	2455.6	146.1	1.00	56.72	0.087	123.8619	0.023823	3.3068	0.004708	68.06534	8.508167
	01-21-2016 15	0	165	1427.9	0.5000	714.0	1.7146	2448.3	146.5	1.00	56.89	0.087	124.2273	0.023893	3.3068	0.004722	68.26614	8.533267
	01-21-2016 16	0	165	1419.6	0.5060	718.3	1.7209	2443.0	145.7	1.00	56.56	0.087	123.5052	0.023754	3.3068	0.004694	67.86932	8.483665
	01-21-2016 17	0	164	1416.6	0.5060	716.8	1.7156	2430.3	145.3	1.00	56.44	0.087	123.2442	0.023704	3.3068	0.004684	67.7259	8.465737
	01-21-2016 18	0	164	1418.1	0.5080	720.4	1.7013	2412.6	145.5	1.00	56.50	0.087	123.3747	0.023729	3.3068	0.004689	67.79761	8.474701

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-21-2016 19	0	164	1427.5	0.4980	710.9	1.7188	2453.6	146.5	1.00	56.87	0.087	124.1925	0.023886	3.3068	0.00472	68.24701	8.530876
	01-21-2016 20	0	165	1433.5	0.4960	711.0	1.7091	2450.0	147.1	1.00	57.11	0.087	124.7145	0.023987	3.3068	0.00474	68.53386	8.566733
	01-21-2016 21	0	165	1432.9	0.4900	702.1	1.7056	2443.9	147.0	1.00	57.09	0.087	124.6623	0.023977	3.3068	0.004738	68.50518	8.563147
	01-21-2016 22	0	166	1438.7	0.4880	702.1	1.7065	2455.1	147.6	1.00	57.32	0.087	125.1669	0.024074	3.3068	0.004757	68.78247	8.597809
	01-21-2016 23	0	166	1441.2	0.4890	704.7	1.6973	2446.1	147.9	1.00	57.42	0.087	125.3844	0.024116	3.3068	0.004766	68.90199	8.612749
	01-22-2016 00	0	166	1443.1	0.4910	708.6	1.7008	2454.4	148.1	1.00	57.49	0.087	125.5497	0.024147	3.3068	0.004772	68.99283	8.624104
	01-22-2016 01	0	166	1447.0	0.4940	714.8	1.6849	2438.0	148.5	1.00	57.65	0.087	125.889	0.024213	3.3068	0.004785	69.17928	8.64741
	01-22-2016 02	0	166	1447.3	0.4940	715.0	1.6786	2429.5	148.5	1.00	57.66	0.087	125.9151	0.024218	3.3068	0.004786	69.19363	8.649203
	01-22-2016 03	0	166	1442.3	0.4940	712.5	1.6845	2429.6	148.0	1.00	57.46	0.087	125.4801	0.024134	3.3068	0.004769	68.95458	8.619323
	01-22-2016 04	0	166	1441.3	0.4920	709.1	1.6763	2416.0	147.9	1.00	57.42	0.087	125.3931	0.024117	3.3068	0.004766	68.90677	8.613347
	01-22-2016 05	0	150	1366.1	0.4270	583.3	1.6512	2255.7	140.2	1.00	54.43	0.087	118.8507	0.022859	3.3068	0.004517	65.31155	8.163944
	01-22-2016 06	0	169	1478.7	0.5210	770.4	1.6685	2467.2	151.7	1.00	58.91	0.087	128.6469	0.024743	3.3068	0.00489	70.69482	8.836853
	01-22-2016 07	0	169	1477.1	0.5230	772.5	1.6703	2467.2	151.6	1.00	58.85	0.087	128.5077	0.024716	3.3068	0.004884	70.61833	8.827291
	01-22-2016 08	0	170	1476.8	0.5250	775.3	1.6652	2459.1	151.5	1.00	58.84	0.087	128.4816	0.024711	3.3068	0.004883	70.60398	8.825498
	01-22-2016 09	0	174	1499.0	0.5020	752.5	1.6126	2417.3	153.8	1.00	59.72	0.087	130.413	0.025083	3.3068	0.004957	71.66534	8.958167
	01-22-2016 10	0	171	1492.0	0.5520	823.6	1.6338	2437.6	153.1	1.00	59.44	0.087	129.804	0.024966	3.3068	0.004934	71.33068	8.916335
	01-22-2016 11	0	171	1491.2	0.5390	803.8	1.6473	2456.5	153.0	1.00	59.41	0.087	129.7344	0.024952	3.3068	0.004931	71.29243	8.911554
	01-22-2016 12	0	171	1488.7	0.5310	790.5	1.6550	2463.8	152.7	1.00	59.31	0.087	129.5169	0.024911	3.3068	0.004923	71.17291	8.896614
	01-22-2016 13	0	172	1506.4	0.5260	792.4	1.6389	2468.9	154.6	1.00	60.02	0.087	131.0568	0.025207	3.3068	0.004981	72.01912	9.00239
	01-22-2016 14	0	172	1505.1	0.5300	797.7	1.6342	2459.6	154.4	1.00	59.96	0.087	130.9437	0.025185	3.3068	0.004977	71.95697	8.994622
	01-22-2016 15	0	172	1498.6	0.5320	797.3	1.6275	2438.9	153.8	1.00	59.71	0.087	130.3782	0.025076	3.3068	0.004956	71.64622	8.955777
	01-22-2016 16	0	171	1498.6	0.5330	798.8	1.6165	2422.5	153.8	1.00	59.71	0.087	130.3782	0.025076	3.3068	0.004956	71.64622	8.955777
	01-22-2016 17	0	171	1490.3	0.5350	797.3	1.6150	2406.8	152.9	1.00	59.37	0.087	129.6561	0.024937	3.3068	0.004928	71.2494	8.906175
	01-22-2016 18	0	158	1364.6	0.5700	777.8	1.5827	2159.8	140.0	1.00	54.37	0.087	118.7202	0.022834	3.3068	0.004512	65.23984	8.15498
	01-22-2016 19	0	169	1479.9	0.5050	747.3	1.6009	2369.2	151.8	1.00	58.96	0.087	128.7513	0.024763	3.3068	0.004894	70.75219	8.844024
	01-22-2016 20	0	172	1503.7	0.5200	781.9	1.5777	2372.4	154.3	1.00	59.91	0.087	130.8219	0.025162	3.3068	0.004972	71.89004	8.986255
	01-22-2016 21	0	174	1509.5	0.5270	795.5	1.5816	2387.5	154.9	1.00	60.14	0.087	131.3265	0.025259	3.3068	0.004992	72.16733	9.020916
	01-22-2016 22	0	174	1513.5	0.5330	806.7	1.5737	2381.8	155.3	1.00	60.30	0.087	131.6745	0.025325	3.3068	0.005005	72.35857	9.044821
	01-22-2016 23	0	174	1510.8	0.5400	815.8	1.5846	2394.0	155.0	1.00	60.19	0.087	131.4396	0.02528	3.3068	0.004996	72.22948	9.028685
	01-23-2016 00	0	169	1478.9	0.5660	837.1	1.5822	2339.9	151.7	1.00	58.92	0.087	128.6643	0.024747	3.3068	0.00489	70.70438	8.838048
	01-23-2016 01	0	170	1488.1	0.5520	821.4	1.5766	2346.2	152.7	1.00	59.29	0.087	129.4647	0.0249	3.3068	0.004921	71.14422	8.893028
	01-23-2016 02	0	170	1488.5	0.5580	830.6	1.5661	2331.1	152.7	1.00	59.30	0.087	129.4995	0.024907	3.3068	0.004922	71.16335	8.895418
	01-23-2016 03	0	170	1488.2	0.5640	839.3	1.5605	2322.4	152.7	1.00	59.29	0.087	129.4734	0.024902	3.3068	0.004921	71.149	8.893625
	01-23-2016 04	0	170	1496.1	0.5660	846.8	1.5537	2324.5	153.5	1.00	59.61	0.087	130.1607	0.025034	3.3068	0.004947	71.52669	8.940837
	01-23-2016 05	0	170	1492.1	0.5570	831.1	1.5494	2311.8	153.1	1.00	59.45	0.087	129.8127	0.024967	3.3068	0.004934	71.33546	8.916932
	01-23-2016 06	0	170	1489.7	0.5590	832.7	1.5614	2326.0	152.8	1.00	59.35	0.087	129.6039	0.024927	3.3068	0.004926	71.22072	8.90259
	01-23-2016 07	0	170	1492.1	0.5580	832.6	1.5588	2325.9	153.1	1.00	59.45	0.087	129.8127	0.024967	3.3068	0.004934	71.33546	8.916932
	01-23-2016 08	0	170	1493.8	0.5640	842.5	1.5552	2323.2	153.3	1.00	59.51	0.087	129.9606	0.024996	3.3068	0.00494	71.41673	8.927092
	01-23-2016 09	0	170	1499.2	0.5500	824.6	1.5526	2327.6	153.8	1.00	59.73	0.087	130.4304	0.025086	3.3068	0.004958	71.6749	8.959363
	01-23-2016 10	0	169	1496.5	0.5450	815.6	1.5604	2335.2	153.5	1.00	59.62	0.087	130.1955	0.025041	3.3068	0.004949	71.54582	8.943227
	01-23-2016 11	0	169	1483.4	0.5500	815.9	1.5758	2337.5	152.2	1.00	59.10	0.087	129.0558	0.024822	3.3068	0.004905	70.91952	8.86494
	01-23-2016 12	0	168	1478.3	0.5540	819.0	1.5693	2319.9	151.7	1.00	58.90	0.087	128.6121	0.024736	3.3068	0.004888	70.6757	8.834462
	01-23-2016 13	0	168	1478.6	0.5540	819.1	1.5716	2323.8	151.7	1.00	58.91	0.087	128.6382	0.024742	3.3068	0.004889	70.69004	8.836255
	01-23-2016 14	0	166	1474.5	0.5560	819.8	1.5585	2298.0	151.3	1.00	58.75	0.087	128.2815	0.024673	3.3068	0.004876	70.49402	8.811753
	01-23-2016 15	0	166	1472.4	0.5590	823.1	1.5631	2301.5	151.1	1.00	58.66	0.087	128.0988	0.024638	3.3068	0.004869	70.39363	8.799203
	01-23-2016 16	0	166	1475.7	0.5570	822.0	1.5666	2311.8	151.4	1.00	58.79	0.087	128.3859	0.024693	3.3068	0.00488	70.55139	8.818924
	01-23-2016 17	0	166	1467.0	0.5600	821.5	1.5800	2317.9	150.5	1.00	58.45	0.087	127.629	0.024547	3.3068	0.004851	70.13546	8.766932

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-23-2016 18	0	165	1469.4	0.5550	815.5	1.5727	2310.9	150.8	1.00	58.54	0.087	127.8378	0.024588	3.3068	0.004859	70.2502	8.781275
	01-23-2016 19	0	166	1470.7	0.5560	817.7	1.5795	2322.9	150.9	1.00	58.59	0.087	127.9509	0.024609	3.3068	0.004863	70.31235	8.789044
	01-23-2016 20	0	165	1467.8	0.5520	810.2	1.5836	2324.4	150.6	1.00	58.48	0.087	127.6986	0.024561	3.3068	0.004854	70.17371	8.771713
	01-23-2016 21	0	166	1468.2	0.5510	809.0	1.5928	2338.6	150.6	1.00	58.49	0.087	127.7334	0.024567	3.3068	0.004855	70.19283	8.774104
	01-23-2016 22	0	165	1468.7	0.5410	794.6	1.6001	2350.1	150.7	1.00	58.51	0.087	127.7769	0.024576	3.3068	0.004857	70.21673	8.777092
	01-23-2016 23	0	166	1472.4	0.5400	795.1	1.6019	2358.7	151.1	1.00	58.66	0.087	128.0988	0.024638	3.3068	0.004869	70.39363	8.799203
	01-24-2016 00	0	165	1474.4	0.5410	797.7	1.6074	2369.9	151.3	1.00	58.74	0.087	128.2728	0.024671	3.3068	0.004876	70.48924	8.811155
	01-24-2016 01	0	166	1464.2	0.5480	802.4	1.6180	2369.1	150.2	1.00	58.33	0.087	127.3854	0.024501	3.3068	0.004842	70.00159	8.750199
	01-24-2016 02	0	165	1480.7	0.5350	792.2	1.6070	2379.5	151.9	1.00	58.99	0.087	128.8209	0.024777	3.3068	0.004896	70.79044	8.848805
	01-24-2016 03	0	166	1466.3	0.5440	797.7	1.6233	2380.3	150.4	1.00	58.42	0.087	127.5681	0.024536	3.3068	0.004849	70.10199	8.762749
	01-24-2016 04	0	130	1209.3	0.6520	788.5	1.5607	1887.4	124.1	1.00	48.18	0.087	105.2091	0.020235	3.3068	0.003999	57.81514	7.226892
	01-24-2016 05	0	129	1195.9	0.6210	742.7	1.5397	1841.3	122.7	1.00	47.65	0.087	104.0433	0.020011	3.3068	0.003955	57.1745	7.146813
	01-24-2016 06	0	129	1200.9	0.6210	745.8	1.5566	1869.3	123.2	1.00	47.84	0.087	104.4783	0.020095	3.3068	0.003971	57.41355	7.176693
	01-24-2016 07	0	129	1198.8	0.6210	744.5	1.5612	1871.6	123.0	1.00	47.76	0.087	104.2956	0.02006	3.3068	0.003964	57.31315	7.164143
	01-24-2016 08	0	129	1191.3	0.6290	749.3	1.5726	1873.4	122.2	1.00	47.46	0.087	103.6431	0.019934	3.3068	0.003939	56.95458	7.119323
	01-24-2016 09	0	127	1174.8	0.6200	728.4	1.5757	1851.1	120.5	1.00	46.80	0.087	102.2076	0.019658	3.3068	0.003885	56.16574	7.020717
	01-24-2016 10	0	116	1083.6	0.5790	627.4	1.5751	1706.8	111.2	1.00	43.17	0.087	94.2732	0.018132	3.3068	0.003583	51.80558	6.475697
	01-24-2016 11	0	109	1014.1	0.4590	465.5	1.6183	1641.1	104.0	1.00	40.40	0.087	88.2267	0.016969	3.3068	0.003353	48.48287	6.060359
	01-24-2016 12	0	115	1091.0	0.4900	534.6	1.5977	1743.1	111.9	1.00	43.47	0.087	94.917	0.018256	3.3068	0.003608	52.15936	6.51992
	01-24-2016 13	0	123	1125.8	0.5190	584.3	1.6000	1801.3	115.5	1.00	44.85	0.087	97.9446	0.018838	3.3068	0.003723	53.82311	6.727888
	01-24-2016 14	0	154	1388.9	0.5090	707.0	1.6022	2225.3	142.5	1.00	55.33	0.087	120.8343	0.023241	3.3068	0.004593	66.40159	8.300199
	01-24-2016 15	0	168	1483.3	0.5410	802.5	1.5818	2346.3	152.2	1.00	59.10	0.087	129.0471	0.02482	3.3068	0.004905	70.91474	8.864343
	01-24-2016 16	0	168	1481.4	0.5680	841.4	1.5767	2335.7	152.0	1.00	59.02	0.087	128.8818	0.024788	3.3068	0.004899	70.8239	8.852988
	01-24-2016 17	0	166	1495.9	0.5420	810.8	1.5716	2350.9	153.5	1.00	59.60	0.087	130.1433	0.025031	3.3068	0.004947	71.51713	8.939641
	01-24-2016 18	0	165	1476.8	0.5250	775.3	1.5723	2322.0	151.5	1.00	58.84	0.087	128.4816	0.024711	3.3068	0.004883	70.60398	8.825498
	01-24-2016 19	0	165	1474.8	0.5130	756.6	1.5672	2311.3	151.3	1.00	58.76	0.087	128.3076	0.024678	3.3068	0.004877	70.50837	8.813546
	01-24-2016 20	0	154	1482.3	0.4970	736.7	1.5608	2313.5	152.1	1.00	59.06	0.087	128.9601	0.024803	3.3068	0.004902	70.86693	8.858367
	01-24-2016 21	0	99	1065.8	0.4240	451.9	1.4444	1539.4	109.4	1.00	42.46	0.087	92.7246	0.017834	3.3068	0.003524	50.95458	6.369323
	01-24-2016 22	0	0	24.2	0.4991	12.1	1.0994	26.6	2.5	0.05	0.97	0.087	2.108445	0.000406	3.3068	8.01E-05	1.158645	0.144831
	01-24-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-25-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2016 14	0	0	7.8	0.0051	0.0	0.0000	0.0	0.8	0.40	0.31	0.087	0.6786	0.000131	3.3068	2.58E-05	0.372908	0.046614
	01-27-2016 15	0	0	102.4	0.0273	2.8	0.0000	0.0	10.5	1.00	4.08	0.087	8.9088	0.001713	3.3068	0.000339	4.895618	0.611952

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-27-2016 16	0	0	108.7	0.0386	4.2	0.0175	1.9	11.2	1.00	4.33	0.087	9.4569	0.001819	3.3068	0.000359	5.196813	0.649602
	01-27-2016 17	0	0	114.7	0.0471	5.4	0.0418	4.8	11.8	1.00	4.57	0.087	9.9789	0.001919	3.3068	0.000379	5.483665	0.685458
	01-27-2016 18	0	0	116.2	0.0491	5.7	0.0422	4.9	11.9	1.00	4.63	0.087	10.1094	0.001944	3.3068	0.000384	5.555378	0.694422
	01-27-2016 19	0	0	116.7	0.0497	5.8	0.0420	4.9	12.0	1.00	4.65	0.087	10.1529	0.001953	3.3068	0.000386	5.579283	0.69741
	01-27-2016 20	0	0	161.6	0.0600	9.7	0.0514	8.3	16.6	1.00	6.44	0.087	14.0592	0.002704	3.3068	0.000534	7.725896	0.965737
	01-27-2016 21	0	0	177.8	0.0619	11.0	0.0461	8.2	18.2	1.00	7.08	0.087	15.4686	0.002975	3.3068	0.000588	8.500398	1.06255
	01-27-2016 22	0	0	161.8	0.0532	8.6	0.0488	7.9	16.6	1.00	6.45	0.087	14.0766	0.002707	3.3068	0.000535	7.735458	0.966932
	01-27-2016 23	0	0	163.6	0.0532	8.7	0.0471	7.7	16.8	1.00	6.52	0.087	14.2332	0.002738	3.3068	0.000541	7.821514	0.977689
	01-28-2016 00	0	0	155.4	0.0502	7.8	0.0431	6.7	15.9	1.00	6.19	0.087	13.5198	0.0026	3.3068	0.000514	7.429482	0.928685
	01-28-2016 01	0	0	147.4	0.0488	7.2	0.0387	5.7	15.1	1.00	5.87	0.087	12.8238	0.002466	3.3068	0.000487	7.047012	0.880876
	01-28-2016 02	0	0	156.5	0.0511	8.0	0.0415	6.5	16.1	1.00	6.24	0.087	13.6155	0.002619	3.3068	0.000518	7.482072	0.935259
	01-28-2016 03	0	0	147.0	0.0483	7.1	0.0388	5.7	15.1	1.00	5.86	0.087	12.789	0.00246	3.3068	0.000486	7.027888	0.878486
	01-28-2016 04	0	0	147.6	0.0481	7.1	0.0386	5.7	15.1	1.00	5.88	0.087	12.8412	0.00247	3.3068	0.000488	7.056574	0.882072
	01-28-2016 05	0	0	156.2	0.0519	8.1	0.0448	7.0	16.0	1.00	6.22	0.087	13.5894	0.002614	3.3068	0.000517	7.467729	0.933466
	01-28-2016 06	0	0	156.9	0.0497	7.8	0.0433	6.8	16.1	1.00	6.25	0.087	13.6503	0.002625	3.3068	0.000519	7.501195	0.937649
	01-28-2016 07	0	0	165.3	0.0538	8.9	0.0423	7.0	17.0	1.00	6.59	0.087	14.3811	0.002766	3.3068	0.000547	7.902789	0.987849
	01-28-2016 08	0	0	130.0	0.0469	6.1	0.0400	5.2	13.3	1.00	5.18	0.087	11.31	0.002175	3.3068	0.00043	6.215139	0.776892
	01-28-2016 09	0	3	182.1	0.1340	24.4	0.2960	53.9	18.7	1.00	7.25	0.087	15.8427	0.003047	3.3068	0.000602	8.705976	1.088247
	01-28-2016 10	0	16	330.6	0.3739	123.6	0.8046	266.0	33.9	1.00	13.17	0.087	28.7622	0.005532	3.3068	0.001093	15.80558	1.975697
	01-28-2016 11	0	22	360.4	0.3499	126.1	0.8033	289.5	37.0	1.00	14.36	0.087	31.3548	0.006031	3.3068	0.001192	17.23028	2.153785
	01-28-2016 12	0	42	497.4	0.3030	150.7	1.0115	503.1	51.0	1.00	19.82	0.087	43.2738	0.008323	3.3068	0.001645	23.78008	2.97251
	01-28-2016 13	0	61	610.4	0.3131	191.1	1.1461	699.6	62.6	1.00	24.32	0.087	53.1048	0.010214	3.3068	0.002018	29.18247	3.647809
	01-28-2016 14	0	100	907.3	0.3230	293.1	1.3593	1233.3	93.1	1.00	36.15	0.087	78.9351	0.015182	3.3068	0.003	43.37689	5.422112
	01-28-2016 15	0	114	1026.2	0.4900	502.8	1.3724	1408.4	105.3	1.00	40.88	0.087	89.2794	0.017171	3.3068	0.003393	49.06135	6.132669
	01-28-2016 16	0	114	1016.1	0.5130	521.3	1.4061	1428.7	104.3	1.00	40.48	0.087	88.4007	0.017002	3.3068	0.00336	48.57849	6.072311
	01-28-2016 17	0	115	1047.4	0.5380	563.5	1.5543	1628.0	107.5	1.00	41.73	0.087	91.1238	0.017526	3.3068	0.003464	50.0749	6.259363
	01-28-2016 18	0	117	1039.6	0.5580	580.1	1.5568	1618.5	106.7	1.00	41.42	0.087	90.4452	0.017396	3.3068	0.003438	49.70199	6.212749
	01-28-2016 19	0	117	1043.8	0.5460	569.9	1.5468	1614.5	107.1	1.00	41.59	0.087	90.8106	0.017466	3.3068	0.003452	49.90279	6.237849
	01-28-2016 20	0	116	1045.6	0.5320	556.3	1.5469	1617.4	107.3	1.00	41.66	0.087	90.9672	0.017496	3.3068	0.003458	49.98884	6.248606
	01-28-2016 21	0	117	1046.6	0.5360	561.0	1.5488	1621.0	107.4	1.00	41.70	0.087	91.0542	0.017513	3.3068	0.003461	50.03665	6.254582
	01-28-2016 22	0	117	1044.0	0.5310	554.4	1.5508	1619.0	107.1	1.00	41.59	0.087	90.828	0.017469	3.3068	0.003452	49.91235	6.239044
	01-28-2016 23	0	116	1042.5	0.5260	548.4	1.5566	1622.8	107.0	1.00	41.53	0.087	90.6975	0.017444	3.3068	0.003447	49.84064	6.23008
	01-29-2016 00	0	116	1042.6	0.5260	548.4	1.5623	1628.9	107.0	1.00	41.54	0.087	90.7062	0.017446	3.3068	0.003448	49.84542	6.230677
	01-29-2016 01	0	117	1048.2	0.5270	552.4	1.5570	1632.0	107.5	1.00	41.76	0.087	91.1934	0.01754	3.3068	0.003466	50.11315	6.264143
	01-29-2016 02	0	117	1044.7	0.5280	551.6	1.5610	1630.8	107.2	1.00	41.62	0.087	90.8889	0.017481	3.3068	0.003455	49.94582	6.243227
	01-29-2016 03	0	117	1053.1	0.5220	549.7	1.5509	1633.3	108.1	1.00	41.96	0.087	91.6197	0.017622	3.3068	0.003482	50.34741	6.293426
	01-29-2016 04	0	117	1056.9	0.5290	559.1	1.5437	1631.5	108.4	1.00	42.11	0.087	91.9503	0.017685	3.3068	0.003495	50.52908	6.316135
	01-29-2016 05	0	117	1052.1	0.5360	563.9	1.5390	1619.2	107.9	1.00	41.92	0.087	91.5327	0.017605	3.3068	0.003479	50.2996	6.28745
	01-29-2016 06	0	117	1051.2	0.5330	560.3	1.5508	1630.2	107.9	1.00	41.88	0.087	91.4544	0.01759	3.3068	0.003476	50.25657	6.282072
	01-29-2016 07	0	117	1050.7	0.5330	560.0	1.5509	1629.5	107.8	1.00	41.86	0.087	91.4109	0.017581	3.3068	0.003474	50.23267	6.279084
	01-29-2016 08	0	117	1043.9	0.5370	560.6	1.5538	1622.0	107.1	1.00	41.59	0.087	90.8193	0.017468	3.3068	0.003452	49.90757	6.238446
	01-29-2016 09	0	117	1053.9	0.5260	554.4	1.5485	1632.0	108.1	1.00	41.99	0.087	91.6893	0.017635	3.3068	0.003485	50.38566	6.298207
	01-29-2016 10	0	115	1037.8	0.4800	498.1	1.5697	1629.0	106.5	1.00	41.35	0.087	90.2886	0.017366	3.3068	0.003432	49.61594	6.201992
	01-29-2016 11	0	115	1034.8	0.4710	487.4	1.5702	1624.8	106.2	1.00	41.23	0.087	90.0276	0.017315	3.3068	0.003422	49.47251	6.184064
	01-29-2016 12	0	115	1040.9	0.4640	483.0	1.5645	1628.5	106.8	1.00	41.47	0.087	90.5583	0.017417	3.3068	0.003442	49.76414	6.220518
	01-29-2016 13	0	115	1046.7	0.4550	476.2	1.5569	1629.6	107.4	1.00	41.70	0.087	91.0629	0.017515	3.3068	0.003461	50.04143	6.255179
	01-29-2016 14	0	116	1040.3	0.4770	496.2	1.5708	1634.1	106.7	1.00	41.45	0.087	90.5061	0.017407	3.3068	0.00344	49.73546	6.216932

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-29-2016 15	0	116	1040.2	0.4770	496.2	1.5647	1627.6	106.7	1.00	41.44	0.087	90.4974	0.017406	3.3068	0.00344	49.73068	6.216335
	01-29-2016 16	0	116	1037.7	0.4750	492.9	1.5683	1627.4	106.5	1.00	41.34	0.087	90.2799	0.017364	3.3068	0.003431	49.61116	6.201394
	01-29-2016 17	0	116	1049.9	0.4790	502.9	1.5486	1625.9	107.7	1.00	41.83	0.087	91.3413	0.017568	3.3068	0.003472	50.19442	6.274303
	01-29-2016 18	0	116	1044.4	0.4710	491.9	1.5439	1612.4	107.2	1.00	41.61	0.087	90.8628	0.017476	3.3068	0.003454	49.93147	6.241434
	01-29-2016 19	0	116	1046.7	0.4840	506.6	1.5470	1619.2	107.4	1.00	41.70	0.087	91.0629	0.017515	3.3068	0.003461	50.04143	6.255179
	01-29-2016 20	0	116	1045.5	0.4790	500.8	1.5499	1620.4	107.3	1.00	41.65	0.087	90.9585	0.017494	3.3068	0.003457	49.98406	6.248008
	01-29-2016 21	0	116	1053.2	0.4770	502.4	1.5385	1620.4	108.1	1.00	41.96	0.087	91.6284	0.017623	3.3068	0.003483	50.35219	6.294024
	01-29-2016 22	0	116	1048.4	0.4730	495.9	1.5421	1616.7	107.6	1.00	41.77	0.087	91.2108	0.017543	3.3068	0.003467	50.12271	6.265339
	01-29-2016 23	0	113	1014.8	0.4570	463.8	1.5262	1548.8	104.1	1.00	40.43	0.087	88.2876	0.016981	3.3068	0.003356	48.51633	6.064542
	01-30-2016 00	0	58	516.7	0.3150	162.7	1.0091	521.4	53.0	0.92	20.58	0.087	44.95046	0.008646	3.3068	0.001709	24.70145	3.087681
	01-30-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (Lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-31-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-02-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-04-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-06-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2016 05	0	0	27.5	0.0032	0.1	0.0000	0.0	2.8	0.88	1.09	0.087	2.388672	0.000459	3.3068	9.08E-05	1.312637	0.16408
	02-08-2016 06	0	0	23.5	0.0000	0.0	0.0000	0.0	2.4	1.00	0.94	0.087	2.0445	0.000393	3.3068	7.77E-05	1.123506	0.140438
	02-08-2016 07	0	0	23.4	0.0000	0.0	0.0000	0.0	2.4	1.00	0.93	0.087	2.0358	0.000392	3.3068	7.74E-05	1.118725	0.139841
	02-08-2016 08	0	0	17.1	0.0000	0.0	0.0000	0.0	1.7	0.72	0.68	0.087	1.484568	0.000286	3.3068	5.64E-05	0.815809	0.101976
	02-08-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substantiated Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-08-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2016 11	0	0	4.6	0.0000	0.0	0.0000	0.0	0.5	0.20	0.18	0.087	0.39672	7.63E-05	3.3068	1.51E-05	0.218008	0.027251
	02-08-2016 12	0	0	46.9	0.0043	0.2	0.0000	0.0	4.8	1.00	1.87	0.087	4.0803	0.000785	3.3068	0.000155	2.242231	0.280279
	02-08-2016 13	0	0	90.4	0.0188	1.7	0.0000	0.0	9.3	1.00	3.60	0.087	7.8648	0.001513	3.3068	0.000299	4.321912	0.540239
	02-08-2016 14	0	0	131.1	0.0351	4.6	0.0000	0.0	13.4	1.00	5.22	0.087	11.4057	0.002194	3.3068	0.000434	6.267729	0.783466
	02-08-2016 15	0	0	150.2	0.0439	6.6	0.0113	1.7	15.4	1.00	5.98	0.087	13.0674	0.002513	3.3068	0.000497	7.180876	0.89761
	02-08-2016 16	0	0	153.9	0.0461	7.1	0.0149	2.3	15.8	1.00	6.13	0.087	13.3893	0.002575	3.3068	0.000509	7.357769	0.919721
	02-08-2016 17	0	0	144.8	0.0463	6.7	0.0159	2.3	14.9	1.00	5.77	0.087	12.5976	0.002423	3.3068	0.000479	6.922709	0.865339
	02-08-2016 18	0	0	145.7	0.0460	6.7	0.0158	2.3	15.0	1.00	5.80	0.087	12.6759	0.002438	3.3068	0.000482	6.965737	0.870717
	02-08-2016 19	0	0	155.8	0.0462	7.2	0.0167	2.6	16.0	1.00	6.21	0.087	13.5546	0.002607	3.3068	0.000515	7.448606	0.931076
	02-08-2016 20	0	0	175.6	0.0461	8.1	0.0216	3.8	18.0	1.00	7.00	0.087	15.2772	0.002938	3.3068	0.000581	8.395219	1.049402
	02-08-2016 21	0	0	168.4	0.0457	7.7	0.0243	4.1	17.3	1.00	6.71	0.087	14.6508	0.002818	3.3068	0.000557	8.050996	1.006375
	02-08-2016 22	0	0	180.9	0.0448	8.1	0.0265	4.8	18.6	1.00	7.21	0.087	15.7383	0.003027	3.3068	0.000598	8.648606	1.081076
	02-08-2016 23	0	0	172.9	0.0451	7.8	0.0260	4.5	17.7	1.00	6.89	0.087	15.0423	0.002893	3.3068	0.000572	8.266135	1.033267
	02-09-2016 00	0	6	258.9	0.1881	48.7	0.3932	101.8	26.6	1.00	10.31	0.087	22.5243	0.004332	3.3068	0.000856	12.37769	1.547211
	02-09-2016 01	0	56	670.0	0.3290	220.4	1.1060	741.0	68.7	1.00	26.69	0.087	58.29	0.011211	3.3068	0.002216	32.03187	4.003984
	02-09-2016 02	0	98	1028.6	0.3710	381.6	1.4132	1453.6	105.5	1.00	40.98	0.087	89.4882	0.017212	3.3068	0.003401	49.1761	6.147012
	02-09-2016 03	0	90	902.8	0.2930	264.5	1.3710	1237.7	92.6	1.00	35.97	0.087	78.5436	0.015107	3.3068	0.002985	43.16175	5.395219
	02-09-2016 04	0	90	894.5	0.2670	238.8	1.2493	1117.5	91.8	1.00	35.64	0.087	77.8215	0.014968	3.3068	0.002958	42.76494	5.345618
	02-09-2016 05	0	117	1167.1	0.4440	518.2	1.3881	1620.1	119.7	1.00	46.50	0.087	101.5377	0.019529	3.3068	0.003859	55.79761	6.974701
	02-09-2016 06	0	130	1257.1	0.4590	577.0	1.4177	1782.2	129.0	1.00	50.08	0.087	109.3677	0.021035	3.3068	0.004157	60.1004	7.512255
	02-09-2016 07	0	136	1297.1	0.5270	683.6	1.4532	1884.9	133.1	1.00	51.68	0.087	112.8477	0.021704	3.3068	0.004289	62.01275	7.751594
	02-09-2016 08	0	143	1336.1	0.4940	650.0	1.5327	2047.9	137.1	1.00	53.23	0.087	116.2407	0.022357	3.3068	0.004418	63.87729	7.984661
	02-09-2016 09	0	146	1349.7	0.4620	623.6	1.5485	2090.0	138.5	1.00	53.77	0.087	117.4239	0.022585	3.3068	0.004463	64.52749	8.065936
	02-09-2016 10	0	145	1332.4	0.4870	648.9	1.5540	2070.6	136.7	1.00	53.08	0.087	115.9188	0.022295	3.3068	0.004406	63.7004	7.962555
	02-09-2016 11	0	145	1334.3	0.5040	672.5	1.5458	2062.5	136.9	1.00	53.16	0.087	116.0841	0.022327	3.3068	0.004412	63.79124	7.973904
	02-09-2016 12	0	148	1349.2	0.4980	671.9	1.5422	2080.8	138.4	1.00	53.75	0.087	117.3804	0.022576	3.3068	0.004461	64.50359	8.062948
	02-09-2016 13	0	150	1367.8	0.4930	674.3	1.5488	2118.4	140.3	1.00	54.49	0.087	118.9986	0.022887	3.3068	0.004523	65.39283	8.174104
	02-09-2016 14	0	151	1374.5	0.5030	691.4	1.5472	2126.6	141.0	1.00	54.76	0.087	119.5815	0.023	3.3068	0.004545	65.71315	8.214143
	02-09-2016 15	0	152	1383.4	0.5270	729.1	1.5557	2152.1	141.9	1.00	55.12	0.087	120.3558	0.023149	3.3068	0.004575	66.13865	8.267331
	02-09-2016 16	0	156	1398.2	0.5180	724.3	1.5757	2203.2	143.5	1.00	55.71	0.087	121.6434	0.023396	3.3068	0.004624	66.84622	8.355777
	02-09-2016 17	0	157	1414.1	0.5100	721.2	1.5703	2220.5	145.1	1.00	56.34	0.087	123.0267	0.023662	3.3068	0.004676	67.60637	8.450797
	02-09-2016 18	0	157	1415.5	0.5050	714.8	1.5665	2217.4	145.2	1.00	56.39	0.087	123.1485	0.023686	3.3068	0.004681	67.67331	8.459163
	02-09-2016 19	0	157	1417.3	0.5030	712.9	1.5731	2229.5	145.4	1.00	56.47	0.087	123.3051	0.023716	3.3068	0.004687	67.75936	8.46992
	02-09-2016 20	0	159	1443.4	0.5100	736.1	1.5806	2281.4	148.1	1.00	57.51	0.087	125.5758	0.024153	3.3068	0.004773	69.00717	8.625896
	02-09-2016 21	0	162	1469.1	0.4990	733.1	1.5799	2321.0	150.7	1.00	58.53	0.087	127.8117	0.024583	3.3068	0.004858	70.23586	8.779482
	02-09-2016 22	0	163	1482.8	0.4930	731.0	1.5845	2349.5	152.1	1.00	59.08	0.087	129.0036	0.024812	3.3068	0.004903	70.89084	8.861355
	02-09-2016 23	0	162	1480.4	0.4990	738.7	1.5868	2349.1	151.9	1.00	58.98	0.087	128.7948	0.024772	3.3068	0.004895	70.7761	8.847012
	02-10-2016 00	0	162	1509.2	0.4850	732.0	1.5562	2348.6	154.8	1.00	60.13	0.087	131.3004	0.025254	3.3068	0.004991	72.15299	9.019124
	02-10-2016 01	0	161	1467.2	0.4800	704.3	1.5150	2222.8	150.5	1.00	58.45	0.087	127.6464	0.024551	3.3068	0.004852	70.14502	8.768127
	02-10-2016 02	0	160	1454.9	0.4770	694.0	1.5141	2202.9	149.3	1.00	57.96	0.087	126.5763	0.024345	3.3068	0.004811	69.55697	8.694622
	02-10-2016 03	0	160	1426.8	0.4830	689.1	1.5608	2226.9	146.4	1.00	56.84	0.087	124.1316	0.023875	3.3068	0.004718	68.21355	8.526693
	02-10-2016 04	0	159	1420.1	0.4850	688.7	1.5621	2218.4	145.7	1.00	56.58	0.087	123.5487	0.023763	3.3068	0.004696	67.89323	8.486653
	02-10-2016 05	0	159	1438.8	0.4760	684.9	1.5373	2211.8	147.6	1.00	57.32	0.087	125.1756	0.024076	3.3068	0.004758	68.78725	8.598406
	02-10-2016 06	0	159	1439.4	0.4800	690.9	1.5482	2228.5	147.7	1.00	57.35	0.087	125.2278	0.024086	3.3068	0.00476	68.81594	8.601992
	02-10-2016 07	0	158	1497.3	0.4790	717.2	1.5495	2320.1	153.6	1.00	59.65	0.087	130.2651	0.025054	3.3068	0.004951	71.58406	8.948008
	02-10-2016 08	0	159	1489.7	0.4920	732.9	1.6099	2398.2	152.8	1.00	59.35	0.087	129.6039	0.024927	3.3068	0.004926	71.22072	8.90259

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-10-2016 09	0	160	1486.7	0.4920	731.5	1.6048	2385.8	152.5	1.00	59.23	0.087	129.3429	0.024877	3.3068	0.004916	71.07729	8.884661
	02-10-2016 10	0	160	1490.4	0.4850	722.8	1.6063	2394.1	152.9	1.00	59.38	0.087	129.6648	0.024939	3.3068	0.004928	71.25418	8.906773
	02-10-2016 11	0	146	1377.6	0.4940	680.5	1.6052	2211.3	141.3	1.00	54.88	0.087	119.8512	0.023051	3.3068	0.004555	65.86135	8.232669
	02-10-2016 12	0	108	1103.9	0.5710	630.3	1.5745	1738.1	113.3	1.00	43.98	0.087	96.0393	0.018472	3.3068	0.00365	52.7761	6.597012
	02-10-2016 13	0	121	1201.2	0.5530	664.3	1.5901	1910.0	123.2	1.00	47.86	0.087	104.5044	0.0201	3.3068	0.003972	57.42789	7.178486
	02-10-2016 14	0	156	1459.3	0.4800	700.5	1.5901	2320.4	149.7	1.00	58.14	0.087	126.9591	0.024419	3.3068	0.004826	69.76733	8.720916
	02-10-2016 15	0	161	1473.9	0.4860	716.3	1.6024	2361.8	151.2	1.00	58.72	0.087	128.2293	0.024663	3.3068	0.004874	70.46534	8.808167
	02-10-2016 16	0	162	1469.3	0.4860	714.1	1.6193	2379.3	150.7	1.00	58.54	0.087	127.8291	0.024586	3.3068	0.004859	70.24542	8.780677
	02-10-2016 17	0	162	1469.2	0.4930	724.3	1.6210	2381.5	150.7	1.00	58.53	0.087	127.8204	0.024584	3.3068	0.004858	70.24064	8.78008
	02-10-2016 18	0	162	1478.5	0.4820	712.6	1.6258	2403.8	151.7	1.00	58.90	0.087	128.6295	0.02474	3.3068	0.004889	70.68526	8.835657
	02-10-2016 19	0	163	1479.2	0.4830	714.5	1.6329	2415.4	151.8	1.00	58.93	0.087	128.6904	0.024752	3.3068	0.004891	70.71873	8.839841
	02-10-2016 20	0	163	1478.3	0.4870	719.9	1.6319	2412.4	151.7	1.00	58.90	0.087	128.6121	0.024736	3.3068	0.004888	70.6757	8.834462
	02-10-2016 21	0	162	1460.5	0.4940	721.5	1.6275	2377.0	149.8	1.00	58.19	0.087	127.0635	0.024439	3.3068	0.00483	69.8247	8.728088
	02-10-2016 22	0	162	1448.0	0.4880	706.6	1.6353	2367.9	148.6	1.00	57.69	0.087	125.976	0.024229	3.3068	0.004788	69.22709	8.653386
	02-10-2016 23	0	162	1447.5	0.4880	706.4	1.6374	2370.1	148.5	1.00	57.67	0.087	125.9325	0.024221	3.3068	0.004787	69.20319	8.650398
	02-11-2016 00	0	162	1448.6	0.4890	708.4	1.6356	2369.4	148.6	1.00	57.71	0.087	126.0282	0.02424	3.3068	0.00479	69.25578	8.656972
	02-11-2016 01	0	162	1449.9	0.4910	711.9	1.6334	2368.3	148.8	1.00	57.76	0.087	126.1413	0.024261	3.3068	0.004794	69.31793	8.664741
	02-11-2016 02	0	160	1572.7	0.4870	765.9	1.6119	2535.0	161.4	1.00	62.66	0.087	136.8249	0.026316	3.3068	0.005201	75.18884	9.398606
	02-11-2016 03	0	160	1451.7	0.4740	688.1	1.5663	2273.8	148.9	1.00	57.84	0.087	126.2979	0.024291	3.3068	0.0048	69.40398	8.675498
	02-11-2016 04	0	160	1442.2	0.4760	686.5	1.5699	2264.1	148.0	1.00	57.46	0.087	125.4714	0.024132	3.3068	0.004769	68.9498	8.618725
	02-11-2016 05	0	161	1455.4	0.4640	675.3	1.5224	2215.7	149.3	1.00	57.98	0.087	126.6198	0.024353	3.3068	0.004813	69.58088	8.69761
	02-11-2016 06	0	151	1389.4	0.4730	657.2	1.5107	2099.0	142.6	1.00	55.35	0.087	120.8778	0.023249	3.3068	0.004594	66.4255	8.303187
	02-11-2016 07	0	160	1454.0	0.4710	684.8	1.4905	2167.2	149.2	1.00	57.93	0.087	126.498	0.02433	3.3068	0.004808	69.51394	8.689243
	02-11-2016 08	0	159	1447.1	0.4660	674.3	1.4739	2132.9	148.5	1.00	57.65	0.087	125.8977	0.024214	3.3068	0.004785	69.18406	8.648008
	02-11-2016 09	0	157	1462.4	0.4610	674.2	1.4304	2091.8	150.0	1.00	58.26	0.087	127.2288	0.02447	3.3068	0.004836	69.91554	8.739442
	02-11-2016 10	0	157	1454.4	0.4550	661.8	1.4400	2094.3	149.2	1.00	57.94	0.087	126.5328	0.024337	3.3068	0.004809	69.53307	8.691633
	02-11-2016 11	0	155	1430.0	0.4670	667.8	1.4397	2058.7	146.7	1.00	56.97	0.087	124.41	0.023928	3.3068	0.004729	68.36653	8.545817
	02-11-2016 12	0	154	1430.8	0.4360	623.8	1.4173	2027.9	146.8	1.00	57.00	0.087	124.4796	0.023942	3.3068	0.004731	68.40478	8.550598
	02-11-2016 13	0	158	1434.1	0.4500	645.3	1.4608	2094.9	147.1	1.00	57.14	0.087	124.7667	0.023997	3.3068	0.004742	68.56255	8.570319
	02-11-2016 14	0	154	1414.0	0.4620	653.3	1.4421	2039.1	145.1	1.00	56.33	0.087	123.018	0.023661	3.3068	0.004676	67.60159	8.450199
	02-11-2016 15	0	155	1416.6	0.4290	607.7	1.4415	2042.0	145.3	1.00	56.44	0.087	123.2442	0.023704	3.3068	0.004684	67.7259	8.465737
	02-11-2016 16	0	158	1461.7	0.4400	643.1	1.4471	2115.2	150.0	1.00	58.24	0.087	127.1679	0.024459	3.3068	0.004834	69.88207	8.735259
	02-11-2016 17	0	157	1469.1	0.4500	661.1	1.4366	2110.5	150.7	1.00	58.53	0.087	127.8117	0.024583	3.3068	0.004858	70.23586	8.779482
	02-11-2016 18	0	158	1489.4	0.4560	679.2	1.4333	2134.7	152.8	1.00	59.34	0.087	129.5778	0.024922	3.3068	0.004925	71.20637	8.900797
	02-11-2016 19	0	161	1497.0	0.4670	699.1	1.4289	2139.0	153.6	1.00	59.64	0.087	130.239	0.025049	3.3068	0.00495	71.56972	8.946215
	02-11-2016 20	0	162	1492.6	0.4740	707.5	1.4347	2141.4	153.1	1.00	59.47	0.087	129.8562	0.024976	3.3068	0.004936	71.35936	8.91992
	02-11-2016 21	0	161	1494.5	0.4780	714.4	1.4287	2135.2	153.3	1.00	59.54	0.087	130.0215	0.025008	3.3068	0.004942	71.4502	8.931275
	02-11-2016 22	0	161	1490.0	0.4660	694.3	1.4168	2111.0	152.9	1.00	59.36	0.087	129.63	0.024932	3.3068	0.004927	71.23506	8.904382
	02-11-2016 23	0	154	1419.4	0.4760	675.6	1.4014	1989.1	145.6	1.00	56.55	0.087	123.4878	0.023751	3.3068	0.004694	67.85976	8.48247
	02-12-2016 00	0	109	1115.1	0.5670	632.3	1.3000	1449.6	114.4	1.00	44.43	0.087	97.0137	0.018659	3.3068	0.003687	53.31155	6.663944
	02-12-2016 01	27	136	1614.8	0.5190	838.1	1.3557	2189.2	165.7	1.00	64.33	0.087	140.4876	0.027021	3.3068	0.00534	77.20159	9.650199
	02-12-2016 02	78	165	2336.5	0.4270	997.7	1.5265	3566.7	239.7	1.00	93.09	0.087	203.2755	0.039097	3.3068	0.007726	111.7052	13.96315
	02-12-2016 03	102	165	2548.8	0.4660	1187.7	1.5900	4052.6	261.5	1.00	101.55	0.087	221.7456	0.042649	3.3068	0.008428	121.855	15.23187
	02-12-2016 04	103	164	2543.5	0.4690	1192.9	1.6037	4078.9	261.0	1.00	101.33	0.087	221.2845	0.042561	3.3068	0.008411	121.6016	15.2002
	02-12-2016 05	103	165	2553.4	0.4380	1118.4	1.5893	4058.2	262.0	1.00	101.73	0.087	222.1458	0.042726	3.3068	0.008444	122.0749	15.25936
	02-12-2016 06	103	166	2522.1	0.4440	1119.8	1.6154	4074.2	258.8	1.00	100.48	0.087	219.4227	0.042202	3.3068	0.00834	120.5785	15.07231
	02-12-2016 07	103	166	2524.2	0.4460	1125.8	1.6141	4074.4	259.0	1.00	100.57	0.087	219.6054	0.042238	3.3068	0.008347	120.6789	15.08486

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
TRUE	02-12-2016 08	103	166	2551.7	0.9930	2551.7	1.5953	4072.2	261.9	1.00	101.70	0.087	222.0849	0.042715	3.3068	0.008441	122.0414	15.25518
	02-12-2016 09	103	166	2549.9	0.4600	1173.0	1.5934	4063.0	261.6	1.00	101.59	0.087	221.8413	0.042668	3.3068	0.008432	121.9076	15.23845
	02-12-2016 10	108	165	2571.3	0.4640	1193.1	1.6167	4157.0	263.8	1.00	102.44	0.087	223.7031	0.043026	3.3068	0.008503	122.9307	15.36633
	02-12-2016 11	122	152	2578.2	0.4930	1271.1	1.6179	4171.3	264.5	1.00	102.72	0.087	224.3034	0.043141	3.3068	0.008526	123.2606	15.40757
	02-12-2016 12	147	158	2869.2	0.4530	1299.7	1.6388	4702.1	294.4	1.00	114.31	0.087	249.6204	0.048011	3.3068	0.009488	137.1729	17.14661
	02-12-2016 13	152	161	2936.4	0.4790	1406.5	1.6162	4745.9	301.3	1.00	116.99	0.087	255.4668	0.049135	3.3068	0.00971	140.3857	17.54821
	02-12-2016 14	155	161	2895.2	0.4820	1395.5	1.6301	4719.6	297.0	1.00	115.35	0.087	251.8824	0.048446	3.3068	0.009574	138.4159	17.30199
	02-12-2016 15	155	161	2903.2	0.4790	1390.6	1.6314	4736.2	297.9	1.00	115.67	0.087	252.5784	0.048579	3.3068	0.0096	138.7984	17.3498
	02-12-2016 16	160	161	2974.2	0.4850	1442.5	1.6200	4818.2	305.2	1.00	118.49	0.087	258.7554	0.049767	3.3068	0.009835	142.1928	17.7741
	02-12-2016 17	162	158	2968.7	0.4900	1454.7	1.6218	4814.7	304.6	1.00	118.27	0.087	258.2769	0.049675	3.3068	0.009817	141.9299	17.74124
	02-12-2016 18	161	161	2989.9	0.4910	1468.0	1.6200	4843.5	306.8	1.00	119.12	0.087	260.1213	0.05003	3.3068	0.009887	142.9434	17.86793
	02-12-2016 19	161	160	2971.7	0.4880	1450.2	1.6237	4825.1	304.9	1.00	118.39	0.087	258.5379	0.049726	3.3068	0.009827	142.0733	17.75916
	02-12-2016 20	161	153	2927.2	0.4940	1446.0	1.6227	4750.1	300.3	1.00	116.62	0.087	254.6664	0.048981	3.3068	0.00968	139.9458	17.49323
	02-12-2016 21	161	155	2937.4	0.4920	1445.2	1.6267	4778.4	301.4	1.00	117.03	0.087	255.5538	0.049152	3.3068	0.009713	140.4335	17.55418
	02-12-2016 22	161	157	2953.7	0.4930	1456.2	1.6237	4795.8	303.0	1.00	117.68	0.087	256.9719	0.049424	3.3068	0.009767	141.2127	17.65159
	02-12-2016 23	162	151	2884.3	0.4970	1433.5	1.6322	4707.7	295.9	1.00	114.91	0.087	250.9341	0.048263	3.3068	0.009538	137.8948	17.23685
	02-13-2016 00	161	160	2986.5	0.4800	1433.5	1.6239	4849.7	306.4	1.00	118.98	0.087	259.8255	0.049973	3.3068	0.009876	142.7809	17.84761
	02-13-2016 01	161	153	2936.0	0.4680	1374.0	1.6294	4783.8	301.2	1.00	116.97	0.087	255.432	0.049128	3.3068	0.009709	140.3665	17.54582
	02-13-2016 02	161	160	2993.1	0.4620	1382.8	1.6248	4863.3	307.1	1.00	119.25	0.087	260.3997	0.050084	3.3068	0.009898	143.0964	17.88705
	02-13-2016 03	161	160	2996.4	0.4610	1381.3	1.6254	4870.3	307.4	1.00	119.38	0.087	260.5868	0.050139	3.3068	0.009908	143.2542	17.90677
	02-13-2016 04	161	156	2944.1	0.4710	1386.7	1.6292	4796.6	302.1	1.00	117.29	0.087	256.1367	0.049264	3.3068	0.009735	140.7538	17.59422
	02-13-2016 05	159	152	2901.6	0.4400	1276.7	1.6132	4680.9	297.7	1.00	115.60	0.087	252.4392	0.048553	3.3068	0.009595	138.7219	17.34024
	02-13-2016 06	154	154	2892.5	0.4590	1327.7	1.6302	4715.3	296.8	1.00	115.24	0.087	251.6475	0.0484	3.3068	0.009565	138.2869	17.28586
	02-13-2016 07	153	154	2892.6	0.4570	1321.9	1.6157	4673.6	296.8	1.00	115.24	0.087	251.6562	0.048402	3.3068	0.009565	138.2916	17.28645
	02-13-2016 08	153	153	2857.5	0.4660	1331.6	1.6325	4664.9	293.2	1.00	113.84	0.087	248.6025	0.047815	3.3068	0.009449	136.6135	17.07669
	02-13-2016 09	152	153	2870.0	0.4570	1311.6	1.6314	4682.0	294.5	1.00	114.34	0.087	249.69	0.048024	3.3068	0.00949	137.2112	17.15139
	02-13-2016 10	155	159	2939.7	0.4630	1361.1	1.6486	4846.5	301.6	1.00	117.12	0.087	255.7539	0.04919	3.3068	0.009721	140.5434	17.56793
	02-13-2016 11	154	159	2929.2	0.4590	1344.5	1.6477	4826.5	300.5	1.00	116.70	0.087	254.8404	0.049015	3.3068	0.009686	140.0414	17.50518
	02-13-2016 12	154	153	2872.7	0.4600	1321.4	1.6459	4728.1	294.7	1.00	114.45	0.087	249.9249	0.048069	3.3068	0.009499	137.3402	17.16753
	02-13-2016 13	155	159	2930.4	0.4650	1362.6	1.6493	4833.0	300.7	1.00	116.75	0.087	254.9448	0.049035	3.3068	0.00969	140.0988	17.51235
	02-13-2016 14	155	151	2872.1	0.4640	1332.7	1.6483	4734.2	294.7	1.00	114.43	0.087	249.8727	0.048059	3.3068	0.009497	137.3116	17.16394
	02-13-2016 15	155	148	2859.8	0.4990	1427.0	1.6330	4670.1	293.4	1.00	113.94	0.087	248.8026	0.047853	3.3068	0.009457	136.7235	17.09044
	02-13-2016 16	151	152	2834.9	0.4770	1352.2	1.6456	4665.1	290.9	1.00	112.94	0.087	246.6363	0.047437	3.3068	0.009374	135.5331	16.94163
	02-13-2016 17	133	147	2650.1	0.4700	1245.5	1.6450	4359.4	271.9	1.00	105.58	0.087	230.5587	0.044344	3.3068	0.008763	126.698	15.83725
	02-13-2016 18	149	151	2869.1	0.4900	1405.9	1.6481	4728.6	294.4	1.00	114.31	0.087	249.6117	0.048009	3.3068	0.009487	137.1681	17.14602
	02-13-2016 19	157	148	2878.5	0.4960	1427.7	1.6657	4794.6	295.3	1.00	114.68	0.087	250.4295	0.048166	3.3068	0.009519	137.6175	17.20219
	02-13-2016 20	158	158	2979.6	0.4910	1463.0	1.6855	5022.2	305.7	1.00	118.71	0.087	259.2252	0.049858	3.3068	0.009853	142.451	17.80637
	02-13-2016 21	157	157	2964.5	0.5040	1494.1	1.6858	4997.7	304.2	1.00	118.11	0.087	257.9115	0.049605	3.3068	0.009803	141.7291	17.71614
	02-13-2016 22	158	158	2987.0	0.4950	1478.6	1.6984	5073.2	306.5	1.00	119.00	0.087	259.869	0.049982	3.3068	0.009877	142.8048	17.8506
	02-13-2016 23	157	158	2941.0	0.5020	1476.4	1.7149	5043.6	301.7	1.00	117.17	0.087	255.867	0.049212	3.3068	0.009725	140.6056	17.5757
	02-14-2016 00	160	157	2979.7	0.4960	1477.9	1.7117	5100.3	305.7	1.00	118.71	0.087	259.2339	0.04986	3.3068	0.009853	142.4558	17.80697
	02-14-2016 01	160	157	2978.7	0.5000	1489.4	1.7110	5096.7	305.6	1.00	118.67	0.087	259.1469	0.049843	3.3068	0.00985	142.408	17.801
	02-14-2016 02	160	157	2954.2	0.5030	1486.0	1.7292	5108.5	303.1	1.00	117.70	0.087	257.0154	0.049433	3.3068	0.009769	141.2367	17.65458
	02-14-2016 03	160	153	2929.1	0.4990	1461.6	1.7299	5067.0	300.5	1.00	116.70	0.087	254.8317	0.049013	3.3068	0.009686	140.0367	17.50458
	02-14-2016 04	159	152	2920.5	0.4990	1457.3	1.7283	5047.5	299.6	1.00	116.35	0.087	254.0835	0.048869	3.3068	0.009657	139.6255	17.45319
	02-14-2016 05	152	151	2851.5	0.4940	1408.6	1.7232	4913.6	292.6	1.00	113.61	0.087	248.0805	0.047714	3.3068	0.009429	136.3267	17.04084
	02-14-2016 06	152	151	2862.9	0.4970	1422.9	1.7403	4982.4	293.7	1.00	114.06	0.087	249.0723	0.047905	3.3068	0.009467	136.8717	17.10896

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substation Date	Date/Hour	YF01 Gross Load MW Value	YF02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-14-2016 07	153	152	2869.4	0.4980	1429.0	1.7426	5000.2	294.4	1.00	114.32	0.087	249.6378	0.048014	3.3068	0.009488	137.1825	17.14781
	02-14-2016 08	152	148	2824.2	0.5040	1423.4	1.7376	4907.2	289.8	1.00	112.52	0.087	245.7054	0.047258	3.3068	0.009339	135.0215	16.87769
	02-14-2016 09	153	136	2746.5	0.4800	1318.3	1.7356	4766.7	281.8	1.00	109.42	0.087	238.9455	0.045957	3.3068	0.009082	131.3068	16.41335
	02-14-2016 10	154	153	2879.9	0.5090	1465.9	1.7446	5024.3	295.5	1.00	114.74	0.087	250.5513	0.04819	3.3068	0.009523	137.6845	17.21056
	02-14-2016 11	153	152	2839.4	0.4920	1397.0	1.7509	4971.4	291.3	1.00	113.12	0.087	247.0278	0.047512	3.3068	0.009389	135.7482	16.96853
	02-14-2016 12	158	160	2923.1	0.4890	1429.4	1.7563	5133.7	299.9	1.00	116.46	0.087	254.3097	0.048912	3.3068	0.009666	139.7498	17.46873
	02-14-2016 13	158	160	2923.5	0.4870	1423.7	1.7639	5156.7	300.0	1.00	116.47	0.087	254.3445	0.048919	3.3068	0.009667	139.7689	17.47112
	02-14-2016 14	158	160	2946.2	0.4850	1428.9	1.7620	5191.1	302.3	1.00	117.38	0.087	256.3194	0.049299	3.3068	0.009742	140.8542	17.60677
	02-14-2016 15	158	160	2929.4	0.4910	1438.3	1.7626	5163.3	300.6	1.00	116.71	0.087	254.8578	0.049018	3.3068	0.009687	140.051	17.50637
	02-14-2016 16	155	155	2869.6	0.4870	1397.5	1.7626	5058.0	294.4	1.00	114.33	0.087	249.6552	0.048017	3.3068	0.009489	137.192	17.149
	02-14-2016 17	153	152	2841.7	0.4840	1375.4	1.7537	4983.5	291.6	1.00	113.22	0.087	247.2279	0.04755	3.3068	0.009397	135.8582	16.98227
	02-14-2016 18	152	151	2815.5	0.4780	1345.8	1.7483	4922.3	288.9	1.00	112.17	0.087	244.9485	0.047112	3.3068	0.00931	134.6056	16.8257
	02-14-2016 19	157	158	2925.0	0.4850	1418.6	1.7689	5174.1	300.1	1.00	116.53	0.087	254.475	0.048944	3.3068	0.009672	139.8406	17.48008
	02-14-2016 20	157	157	2924.7	0.4740	1386.3	1.7567	5137.7	300.1	1.00	116.52	0.087	254.4489	0.048939	3.3068	0.009671	139.8263	17.47829
	02-14-2016 21	157	157	2919.4	0.4900	1430.5	1.7658	5155.1	299.5	1.00	116.31	0.087	253.9878	0.048851	3.3068	0.009654	139.5729	17.44661
	02-14-2016 22	157	158	2938.6	0.5000	1469.3	1.7470	5133.8	301.5	1.00	117.08	0.087	255.6582	0.049172	3.3068	0.009717	140.4908	17.56135
	02-14-2016 23	160	157	2940.8	0.5040	1482.2	1.7642	5188.2	301.7	1.00	117.16	0.087	255.8496	0.049209	3.3068	0.009725	140.596	17.5745
	02-15-2016 00	160	160	2989.5	0.4990	1491.8	1.7569	5252.2	306.7	1.00	119.10	0.087	260.0865	0.050024	3.3068	0.009886	142.9243	17.86554
	02-15-2016 01	160	157	2933.8	0.5050	1481.6	1.7520	5140.1	301.0	1.00	116.88	0.087	255.2406	0.049091	3.3068	0.009701	140.2614	17.53267
	02-15-2016 02	160	160	2973.0	0.4980	1480.6	1.7445	5186.3	305.0	1.00	118.45	0.087	258.651	0.049747	3.3068	0.009831	142.1355	17.76693
	02-15-2016 03	160	160	2965.9	0.5010	1485.9	1.7480	5184.3	304.3	1.00	118.16	0.087	258.0333	0.049629	3.3068	0.009808	141.796	17.7245
	02-15-2016 04	159	161	2960.1	0.5000	1480.1	1.7553	5195.9	303.7	1.00	117.93	0.087	257.5287	0.049532	3.3068	0.009788	141.5187	17.68984
	02-15-2016 05	152	154	2842.8	0.5020	1427.1	1.7507	4976.8	291.7	1.00	113.26	0.087	247.3236	0.047569	3.3068	0.0094	135.9108	16.98884
	02-15-2016 06	137	145	2635.7	0.5060	1333.7	1.7551	4626.0	270.4	1.00	105.01	0.087	229.3059	0.044103	3.3068	0.008716	126.0096	15.7512
	02-15-2016 07	150	160	2893.5	0.4980	1441.0	1.7575	5085.3	296.9	1.00	115.28	0.087	251.7345	0.048417	3.3068	0.009568	138.3347	17.29183
	02-15-2016 08	158	161	2962.2	0.5040	1492.9	1.7518	5189.2	303.9	1.00	118.02	0.087	257.7114	0.049567	3.3068	0.009795	141.6191	17.70239
	02-15-2016 09	160	162	2976.9	0.5050	1503.3	1.7560	5227.3	305.4	1.00	118.60	0.087	258.9903	0.049813	3.3068	0.009844	142.3219	17.79024
	02-15-2016 10	157	160	2918.9	0.4980	1453.6	1.7661	5155.0	299.5	1.00	116.29	0.087	253.9443	0.048842	3.3068	0.009652	139.549	17.44363
	02-15-2016 11	155	158	2875.4	0.4920	1414.7	1.7724	5096.4	295.0	1.00	114.56	0.087	250.1598	0.048114	3.3068	0.009508	137.4693	17.18367
	02-15-2016 12	160	162	2984.0	0.4920	1468.1	1.7569	5242.7	306.2	1.00	118.88	0.087	259.608	0.049931	3.3068	0.009867	142.6614	17.83267
	02-15-2016 13	160	125	2653.9	0.5130	1361.5	1.7668	4688.9	272.3	1.00	105.73	0.087	230.8893	0.044408	3.3068	0.008776	126.8797	15.85996
	02-15-2016 14	160	105	2523.8	0.5090	1284.6	1.7558	4431.3	258.9	1.00	100.55	0.087	219.5706	0.042231	3.3068	0.008346	120.6598	15.08247
	02-15-2016 15	160	123	2665.3	0.5170	1378.0	1.7438	4647.7	273.5	1.00	106.19	0.087	231.8811	0.044599	3.3068	0.008814	127.4247	15.92809
	02-15-2016 16	160	158	2916.1	0.5160	1504.7	1.7549	5117.4	299.2	1.00	116.18	0.087	253.7007	0.048795	3.3068	0.009643	139.4151	17.42689
	02-15-2016 17	160	162	2945.1	0.5060	1490.2	1.7559	5171.4	302.2	1.00	117.33	0.087	256.2237	0.049281	3.3068	0.009739	140.8016	17.6002
	02-15-2016 18	152	153	2808.3	0.4920	1381.7	1.7502	4915.0	288.1	1.00	111.88	0.087	244.3221	0.046991	3.3068	0.009286	134.2614	16.78267
	02-15-2016 19	154	160	2899.3	0.4880	1414.9	1.7532	5083.0	297.5	1.00	115.51	0.087	252.2391	0.048514	3.3068	0.009587	138.612	17.32649
	02-15-2016 20	160	161	2949.3	0.4920	1451.1	1.7557	5178.1	302.6	1.00	117.50	0.087	256.5891	0.049351	3.3068	0.009753	141.0024	17.6253
	02-15-2016 21	160	162	2953.9	0.4930	1456.3	1.7519	5175.0	303.1	1.00	117.69	0.087	256.9893	0.049428	3.3068	0.009768	141.2223	17.65279
	02-15-2016 22	159	164	2953.9	0.4960	1465.1	1.7525	5176.8	303.1	1.00	117.69	0.087	256.9893	0.049428	3.3068	0.009768	141.2223	17.65279
	02-15-2016 23	154	164	2911.8	0.4930	1435.5	1.7554	5111.3	298.8	1.00	115.01	0.087	253.3266	0.048723	3.3068	0.009629	139.2096	17.4012
	02-16-2016 00	160	164	2972.1	0.4980	1480.1	1.7658	5248.0	304.9	1.00	118.41	0.087	258.5727	0.049732	3.3068	0.009828	142.0924	17.76155
	02-16-2016 01	160	164	2965.7	0.4960	1471.0	1.7585	5215.3	304.3	1.00	118.16	0.087	258.0159	0.049625	3.3068	0.009807	141.7865	17.72331
	02-16-2016 02	160	164	2995.0	0.4920	1473.5	1.7480	5235.3	307.3	1.00	119.32	0.087	260.565	0.050116	3.3068	0.009904	143.1873	17.89841
	02-16-2016 03	160	165	2985.1	0.4930	1471.7	1.7505	5225.4	306.3	1.00	118.93	0.087	259.7037	0.04995	3.3068	0.009871	142.7139	17.83924
	02-16-2016 04	159	164	2984.3	0.4950	1477.2	1.7542	5235.0	306.2	1.00	118.90	0.087	259.6341	0.049936	3.3068	0.009868	142.6757	17.83446
	02-16-2016 05	154	164	2940.7	0.5000	1470.4	1.7359	5104.7	301.7	1.00	117.16	0.087	255.8409	0.049207	3.3068	0.009724	140.5912	17.5739

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-16-2016 06	159	165	3004.5	0.4990	1499.2	1.7486	5253.7	308.3	1.00	119.70	0.087	261.3915	0.050275	3.3068	0.009935	143.6414	17.95518
	02-16-2016 07	158	161	2956.5	0.5100	1507.8	1.7481	5168.4	303.3	1.00	117.79	0.087	257.2155	0.049471	3.3068	0.009776	141.3466	17.66833
	02-16-2016 08	150	152	2791.8	0.4910	1370.8	1.7642	4925.2	286.4	1.00	111.23	0.087	242.8866	0.046715	3.3068	0.009232	133.4725	16.68406
	02-16-2016 09	159	164	3003.2	0.4980	1495.6	1.7523	5262.6	308.1	1.00	119.65	0.087	261.2784	0.050253	3.3068	0.009931	143.5793	17.94741
	02-16-2016 10	160	164	2976.5	0.5020	1494.2	1.7745	5281.9	305.4	1.00	118.59	0.087	258.9555	0.049806	3.3068	0.009843	142.3028	17.78785
	02-16-2016 11	152	161	2875.8	0.4980	1432.1	1.7723	5096.9	295.1	1.00	114.57	0.087	250.1946	0.048121	3.3068	0.00951	137.4884	17.18606
	02-16-2016 12	141	146	2664.1	0.4980	1326.7	1.7575	4682.2	273.3	1.00	106.14	0.087	231.7767	0.044579	3.3068	0.00881	127.3673	15.92092
	02-16-2016 13	152	163	2895.4	0.4960	1436.1	1.7828	5161.8	297.1	1.00	115.35	0.087	251.8998	0.048449	3.3068	0.009574	138.4255	17.30319
	02-16-2016 14	155	165	2919.5	0.5090	1486.0	1.7777	5189.9	299.5	1.00	116.31	0.087	253.9965	0.048852	3.3068	0.009654	139.5777	17.44721
	02-16-2016 15	165	165	3015.5	0.4890	1474.6	1.7931	5407.1	309.4	1.00	120.14	0.087	262.3485	0.050459	3.3068	0.009972	144.1673	18.02092
	02-16-2016 16	166	163	3011.9	0.4910	1478.8	1.7956	5408.1	309.0	1.00	120.00	0.087	262.0353	0.050398	3.3068	0.00996	143.9952	17.9994
	02-16-2016 17	136	132	2451.8	0.5000	1225.9	1.7854	4377.5	251.6	1.00	97.68	0.087	213.3066	0.041026	3.3068	0.008108	117.2175	14.65219
	02-16-2016 18	127	134	2433.9	0.4880	1187.7	1.7851	4344.8	249.7	1.00	96.97	0.087	211.7493	0.040727	3.3068	0.008048	116.3618	14.54522
	02-16-2016 19	130	137	2463.4	0.5040	1241.6	1.7928	4416.4	252.7	1.00	98.14	0.087	214.3158	0.04122	3.3068	0.008146	117.7721	14.72151
	02-16-2016 20	152	163	2907.3	0.4930	1433.3	1.7928	5212.2	298.3	1.00	115.83	0.087	252.9351	0.048648	3.3068	0.009614	138.9944	17.3743
	02-16-2016 21	155	164	2900.9	0.5000	1450.5	1.8008	5223.8	297.6	1.00	115.57	0.087	252.3783	0.048541	3.3068	0.009593	138.6884	17.33606
	02-16-2016 22	143	149	2668.9	0.4970	1326.4	1.7931	4785.6	273.8	1.00	106.33	0.087	232.1943	0.044659	3.3068	0.008825	127.5968	15.9496
	02-16-2016 23	132	143	2517.7	0.4970	1251.3	1.7945	4517.9	258.3	1.00	100.31	0.087	219.0399	0.042129	3.3068	0.008325	120.3681	15.04602
	02-17-2016 00	111	130	2214.4	0.5130	1136.0	1.8042	3995.2	227.2	1.00	88.22	0.087	192.6528	0.037054	3.3068	0.007323	105.8677	13.23347
	02-17-2016 01	100	107	1932.9	0.5380	1039.9	1.7866	3453.3	198.3	1.00	77.01	0.087	168.1623	0.032343	3.3068	0.006392	92.40956	11.5512
	02-17-2016 02	99	107	1931.1	0.5130	990.7	1.7979	3472.0	198.1	1.00	76.94	0.087	168.0057	0.032313	3.3068	0.006386	92.32351	11.54044
	02-17-2016 03	99	103	1901.1	0.5260	1000.0	1.7777	3379.6	195.1	1.00	75.74	0.087	165.3957	0.031811	3.3068	0.006287	90.88924	11.36116
	02-17-2016 04	101	103	1895.9	0.5320	1008.6	1.7942	3401.6	194.5	1.00	75.53	0.087	164.9433	0.031724	3.3068	0.006269	90.64064	11.33008
	02-17-2016 05	128	137	2489.9	0.4970	1237.5	1.7983	4477.6	255.5	1.00	99.20	0.087	216.6213	0.041664	3.3068	0.008234	119.039	14.87988
	02-17-2016 06	159	165	2954.4	0.5110	1509.7	1.8015	5322.3	303.1	1.00	117.71	0.087	257.0328	0.049436	3.3068	0.00977	141.2462	17.65578
	02-17-2016 07	166	171	3023.6	0.5150	1557.2	1.8147	5486.8	310.2	1.00	120.46	0.087	263.0532	0.050594	3.3068	0.009998	144.5546	18.06932
	02-17-2016 08	149	152	2692.5	0.5100	1373.2	1.8221	4905.9	276.3	1.00	107.27	0.087	234.2475	0.045054	3.3068	0.008903	128.7251	16.09064
	02-17-2016 09	149	155	2762.4	0.4960	1370.2	1.8121	5005.7	283.4	1.00	110.06	0.087	240.3288	0.046223	3.3068	0.009135	132.0669	16.50837
	02-17-2016 10	145	148	2648.3	0.4840	1281.8	1.8163	4810.0	271.7	1.00	105.51	0.087	230.4021	0.044314	3.3068	0.008757	126.612	15.82649
	02-17-2016 11	156	163	2905.5	0.4850	1409.2	1.8189	5284.8	298.1	1.00	115.76	0.087	252.7785	0.048618	3.3068	0.009608	138.9084	17.36355
	02-17-2016 12	156	166	2893.0	0.4790	1385.7	1.8322	5300.5	296.8	1.00	115.26	0.087	251.691	0.048409	3.3068	0.009566	138.3108	17.28884
	02-17-2016 13	156	167	2896.0	0.4810	1393.0	1.8316	5304.2	297.1	1.00	115.38	0.087	251.952	0.048459	3.3068	0.009576	138.4542	17.30677
	02-17-2016 14	155	168	2931.5	0.4740	1389.5	1.8199	5334.9	300.8	1.00	116.79	0.087	255.0405	0.049053	3.3068	0.009694	140.1514	17.51892
	02-17-2016 15	156	167	2928.1	0.4750	1390.8	1.8139	5311.2	300.4	1.00	116.66	0.087	254.7447	0.048996	3.3068	0.009683	139.9888	17.49861
	02-17-2016 16	156	167	2924.5	0.4770	1395.0	1.8094	5291.7	300.1	1.00	116.51	0.087	254.4315	0.048936	3.3068	0.009671	139.8167	17.47709
	02-17-2016 17	156	168	2906.9	0.4620	1343.0	1.8302	5320.3	298.2	1.00	115.81	0.087	252.9003	0.048641	3.3068	0.009612	138.9753	17.37191
	02-17-2016 18	157	165	2889.6	0.4770	1378.3	1.8150	5244.7	296.5	1.00	115.12	0.087	251.3952	0.048352	3.3068	0.009555	138.1482	17.26853
	02-17-2016 19	163	170	2975.0	0.4870	1448.8	1.8176	5407.4	305.2	1.00	118.53	0.087	258.825	0.049781	3.3068	0.009838	142.2311	17.77888
	02-17-2016 20	162	166	2958.6	0.4780	1414.2	1.7988	5322.0	303.6	1.00	117.87	0.087	257.3982	0.049506	3.3068	0.009783	141.447	17.68088
	02-17-2016 21	158	163	2872.6	0.4670	1341.5	1.8090	5196.5	294.7	1.00	114.45	0.087	249.9162	0.048067	3.3068	0.009499	137.3355	17.16693
	02-17-2016 22	147	149	2698.7	0.4750	1281.9	1.7953	4845.1	276.9	1.00	107.52	0.087	234.7869	0.045158	3.3068	0.008924	129.0215	16.12769
	02-17-2016 23	147	149	2698.6	0.4820	1300.7	1.7996	4856.4	276.9	1.00	107.51	0.087	234.7782	0.045156	3.3068	0.008924	129.0167	16.12709
	02-18-2016 00	146	153	2722.8	0.4830	1315.1	1.7918	4878.8	279.4	1.00	108.48	0.087	236.8836	0.045561	3.3068	0.009004	130.1737	16.27171
	02-18-2016 01	145	152	2712.7	0.4860	1318.4	1.7893	4853.8	278.3	1.00	108.08	0.087	236.0049	0.045392	3.3068	0.00897	129.6908	16.21135
	02-18-2016 02	145	152	2685.7	0.4930	1324.1	1.8041	4845.4	275.6	1.00	107.00	0.087	233.6559	0.04494	3.3068	0.008881	128.4	16.05
	02-18-2016 03	145	154	2722.5	0.4840	1317.7	1.8002	4901.1	279.3	1.00	108.47	0.087	236.8575	0.045556	3.3068	0.009003	130.1594	16.26992
	02-18-2016 04	155	163	2863.0	0.4920	1408.6	1.8178	5204.5	293.7	1.00	114.06	0.087	249.081	0.047907	3.3068	0.009467	136.8765	17.10956

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-18-2016 05	155	163	2891.1	0.4850	1402.2	1.7890	5172.1	296.6	1.00	115.18	0.087	251.5257	0.048377	3.3068	0.00956	138.2199	17.27749
	02-18-2016 06	139	142	2528.8	0.5080	1284.6	1.8059	4566.8	259.5	1.00	100.75	0.087	220.0056	0.042315	3.3068	0.008362	120.8988	15.11235
	02-18-2016 07	103	104	1964.8	0.5270	1035.4	1.7907	3518.4	201.6	1.00	78.28	0.087	170.9376	0.032877	3.3068	0.006497	93.93466	11.74183
	02-18-2016 08	104	104	1979.2	0.4960	981.7	1.7921	3547.0	203.1	1.00	78.85	0.087	172.1904	0.033118	3.3068	0.006545	94.62311	11.82789
	02-18-2016 09	105	104	1988.0	0.4960	986.0	1.7918	3562.1	204.0	1.00	79.20	0.087	172.956	0.033265	3.3068	0.006574	95.04382	11.88048
	02-18-2016 10	104	104	1988.7	0.5000	994.4	1.7887	3557.2	204.0	1.00	79.23	0.087	173.0169	0.033277	3.3068	0.006576	95.07729	11.88466
	02-18-2016 11	104	104	1999.6	0.5070	1013.8	1.7700	3539.3	205.2	1.00	79.67	0.087	173.9652	0.033459	3.3068	0.006612	95.59841	11.9498
	02-18-2016 12	98	127	2100.8	0.4940	1037.8	1.7697	3717.7	215.5	1.00	83.70	0.087	182.7696	0.035153	3.3068	0.006947	100.4367	12.55458
	02-18-2016 13	94	144	2193.4	0.4740	1039.7	1.7702	3882.8	225.0	1.00	87.39	0.087	190.8258	0.036702	3.3068	0.007253	104.8637	13.10797
	02-18-2016 14	93	141	2164.5	0.4720	1021.6	1.7795	3851.7	222.1	1.00	86.24	0.087	188.3115	0.036219	3.3068	0.007158	103.4821	12.93526
	02-18-2016 15	95	136	2142.4	0.4640	994.1	1.7838	3821.7	219.8	1.00	85.35	0.087	186.3888	0.035849	3.3068	0.007084	102.4255	12.80319
	02-18-2016 16	130	138	2463.4	0.4620	1138.1	1.8021	4439.4	252.7	1.00	98.14	0.087	214.3158	0.04122	3.3068	0.008146	117.7721	14.72151
	02-18-2016 17	138	139	2541.9	0.4800	1220.1	1.8022	4580.9	260.8	1.00	101.27	0.087	221.1453	0.042534	3.3068	0.008405	121.5251	15.19064
	02-18-2016 18	136	156	2647.1	0.4800	1270.5	1.7896	4737.3	271.6	1.00	105.46	0.087	230.2977	0.044294	3.3068	0.008753	126.5546	15.81932
	02-18-2016 19	134	158	2620.9	0.4870	1276.4	1.8054	4731.9	268.9	1.00	104.42	0.087	228.0183	0.043856	3.3068	0.008667	125.302	15.66275
	02-18-2016 20	125	161	2569.0	0.4820	1238.3	1.7993	4622.4	263.6	1.00	102.35	0.087	223.503	0.042987	3.3068	0.008495	122.8207	15.35259
	02-18-2016 21	128	163	2641.4	0.4730	1249.4	1.7912	4731.3	271.0	1.00	105.24	0.087	229.8018	0.044199	3.3068	0.008735	126.2821	15.78526
	02-18-2016 22	155	169	2896.5	0.4750	1375.8	1.8112	5246.2	297.2	1.00	115.40	0.087	251.9955	0.048467	3.3068	0.009578	138.4781	17.30976
	02-18-2016 23	159	168	2918.0	0.4820	1406.5	1.7947	5236.9	299.4	1.00	116.25	0.087	253.866	0.048827	3.3068	0.009649	139.506	17.43825
	02-19-2016 00	145	150	2624.1	0.4910	1288.4	1.8010	4725.9	269.2	1.00	104.55	0.087	228.2967	0.043909	3.3068	0.008677	125.455	15.68187
	02-19-2016 01	154	159	2792.7	0.4820	1346.1	1.8015	5031.0	286.5	1.00	111.26	0.087	242.9649	0.04673	3.3068	0.009235	133.5155	16.68944
	02-19-2016 02	142	157	2663.9	0.4770	1270.7	1.7938	4778.5	273.3	1.00	106.13	0.087	231.7593	0.044575	3.3068	0.008809	127.3578	15.91972
	02-19-2016 03	139	156	2644.1	0.4760	1258.6	1.7861	4722.5	271.3	1.00	105.34	0.087	230.0367	0.044244	3.3068	0.008743	126.4112	15.80139
	02-19-2016 04	136	151	2579.6	0.4760	1227.9	1.7921	4623.0	264.7	1.00	102.77	0.087	224.4252	0.043165	3.3068	0.00853	123.3275	15.41594
	02-19-2016 05	152	152	2748.0	0.4770	1310.8	1.7661	4853.3	281.9	1.00	109.48	0.087	239.076	0.045982	3.3068	0.009087	131.3785	16.42231
	02-19-2016 06	154	164	2827.1	0.4710	1331.6	1.7988	5085.5	290.1	1.00	112.63	0.087	245.9577	0.047306	3.3068	0.009349	135.1602	16.89502
	02-19-2016 07	148	160	2770.4	0.4700	1302.1	1.7823	4937.8	284.2	1.00	110.37	0.087	241.0248	0.046357	3.3068	0.009161	132.4494	16.55618
	02-19-2016 08	149	160	2782.0	0.4690	1304.8	1.7852	4966.4	285.4	1.00	110.84	0.087	242.034	0.046551	3.3068	0.009199	133.004	16.6255
	02-19-2016 09	150	121	2442.1	0.4900	1196.6	1.7759	4336.9	250.6	1.00	97.29	0.087	212.4627	0.040864	3.3068	0.008075	116.7538	14.59422
	02-19-2016 10	149	98	2256.0	0.4960	1119.0	1.7812	4018.3	231.5	1.00	89.88	0.087	196.272	0.03775	3.3068	0.00746	107.8566	13.48207
	02-19-2016 11	149	98	2271.8	0.5010	1138.2	1.7725	4026.8	233.1	1.00	90.51	0.087	197.6466	0.038014	3.3068	0.007512	108.612	13.57649
	02-19-2016 12	148	123	2482.3	0.5000	1241.2	1.7759	4408.4	254.7	1.00	98.90	0.087	215.9601	0.041536	3.3068	0.008208	118.6757	14.83446
	02-19-2016 13	150	124	2504.1	0.4880	1222.0	1.7613	4410.4	256.9	1.00	99.76	0.087	217.8567	0.041901	3.3068	0.00828	119.7179	14.96474
	02-19-2016 14	150	155	2773.9	0.4950	1373.1	1.7502	4854.9	284.6	1.00	110.51	0.087	241.3293	0.046416	3.3068	0.009173	132.6167	16.57709
	02-19-2016 15	151	158	2779.3	0.4900	1361.9	1.7540	4875.0	285.2	1.00	110.73	0.087	241.7991	0.046506	3.3068	0.009191	132.8749	16.60936
	02-19-2016 16	152	158	2778.2	0.4870	1353.0	1.7652	4904.0	285.0	1.00	110.69	0.087	241.7034	0.046488	3.3068	0.009187	132.8223	16.60279
	02-19-2016 17	154	162	2857.5	0.4850	1385.9	1.7585	5025.0	293.2	1.00	113.84	0.087	248.6025	0.047815	3.3068	0.009449	136.6135	17.07669
	02-19-2016 18	155	164	2842.9	0.4880	1387.3	1.7709	5034.4	291.7	1.00	113.26	0.087	247.3323	0.04757	3.3068	0.009401	135.9155	16.98944
	02-19-2016 19	151	158	2770.7	0.4940	1368.7	1.7603	4877.4	284.3	1.00	110.39	0.087	241.0509	0.046362	3.3068	0.009162	132.4637	16.55797
	02-19-2016 20	152	159	2774.5	0.4780	1326.2	1.7749	4924.4	284.7	1.00	110.54	0.087	241.3815	0.046426	3.3068	0.009175	132.6454	16.58068
	02-19-2016 21	143	152	2642.3	0.4890	1292.1	1.7852	4717.0	271.1	1.00	105.27	0.087	229.8801	0.044214	3.3068	0.008737	126.3251	15.79064
	02-19-2016 22	146	154	2675.0	0.4900	1310.8	1.7845	4773.6	274.5	1.00	106.57	0.087	232.725	0.044761	3.3068	0.008846	127.8884	15.98606
	02-19-2016 23	111	111	2028.9	0.5700	1156.5	1.7785	3608.5	208.2	1.00	80.83	0.087	176.5143	0.03395	3.3068	0.006709	96.9992	12.1249
	02-20-2016 00	104	100	1914.4	0.5690	1089.3	1.7735	3395.2	196.4	1.00	76.27	0.087	166.5528	0.032034	3.3068	0.00633	91.5251	11.44064
	02-20-2016 01	105	99	1916.2	0.5740	1099.9	1.7793	3409.4	196.6	1.00	76.34	0.087	166.7094	0.032064	3.3068	0.006336	91.61116	11.45139
	02-20-2016 02	105	99	1911.9	0.5810	1110.8	1.7721	3388.1	196.2	1.00	76.17	0.087	166.3353	0.031992	3.3068	0.006322	91.40558	11.4257
	02-20-2016 03	106	99	1924.3	0.5830	1121.9	1.7690	3404.1	197.4	1.00	76.67	0.087	167.4141	0.032199	3.3068	0.006363	91.99841	11.4998

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-20-2016 04	124	100	2102.5	0.5530	1162.7	1.7696	3720.5	215.7	1.00	83.76	0.087	182.9175	0.035181	3.3068	0.006952	100.5179	12.56474
	02-20-2016 05	130	99	2123.8	0.5600	1189.3	1.7642	3746.9	217.9	1.00	84.61	0.087	184.7706	0.035538	3.3068	0.007023	101.5363	12.69203
	02-20-2016 06	129	99	2134.6	0.5650	1206.0	1.7609	3758.8	219.0	1.00	85.04	0.087	185.7102	0.035718	3.3068	0.007059	102.0526	12.75657
	02-20-2016 07	129	99	2119.9	0.5600	1187.1	1.7606	3732.2	217.5	1.00	84.45	0.087	184.4313	0.035472	3.3068	0.00701	101.3498	12.66873
	02-20-2016 08	128	123	2252.6	0.5140	1157.8	1.7096	3851.0	231.1	1.00	89.75	0.087	195.9762	0.037693	3.3068	0.007449	107.694	13.46175
	02-20-2016 09	134	130	2355.2	0.5090	1198.8	1.6981	3999.4	241.6	1.00	93.83	0.087	204.9024	0.03941	3.3068	0.007788	112.5992	14.0749
	02-20-2016 10	132	149	2496.2	0.5070	1265.6	1.6932	4226.5	256.1	1.00	99.45	0.087	217.1694	0.041769	3.3068	0.008254	119.3402	14.91753
	02-20-2016 11	132	123	2261.9	0.5140	1162.6	1.6968	3837.9	232.1	1.00	90.12	0.087	196.7853	0.037849	3.3068	0.00748	108.1386	13.51733
	02-20-2016 12	132	98	2060.6	0.4950	1020.0	1.6862	3474.5	211.4	1.00	82.10	0.087	179.2722	0.03448	3.3068	0.006814	98.51474	12.31434
	02-20-2016 13	133	98	2071.1	0.5070	1050.0	1.6823	3484.2	212.5	1.00	82.51	0.087	180.1857	0.034656	3.3068	0.006849	99.01673	12.37709
	02-20-2016 14	129	98	2032.3	0.5320	1081.2	1.6827	3419.8	208.5	1.00	80.97	0.087	176.8101	0.034007	3.3068	0.00672	97.16175	12.14522
	02-20-2016 15	117	98	1932.3	0.5420	1047.3	1.6550	3197.9	198.3	1.00	75.98	0.087	168.1101	0.032333	3.3068	0.00639	92.38088	11.54761
	02-20-2016 16	116	98	1934.3	0.5440	1052.3	1.6451	3182.2	198.5	1.00	77.06	0.087	168.2841	0.032367	3.3068	0.006396	92.47649	11.55956
	02-20-2016 17	116	98	1923.6	0.5370	1033.0	1.6385	3151.9	197.4	1.00	76.64	0.087	167.3532	0.032188	3.3068	0.006361	91.96494	11.49562
	02-20-2016 18	117	125	2168.2	0.5140	1114.5	1.6399	3555.7	222.5	1.00	86.38	0.087	188.6334	0.036281	3.3068	0.00717	103.659	12.95737
	02-20-2016 19	118	159	2463.8	0.5040	1241.8	1.6650	4102.2	252.8	1.00	98.16	0.087	214.3506	0.041227	3.3068	0.008147	117.7912	14.7239
	02-20-2016 20	124	173	2621.5	0.4890	1281.9	1.6863	4420.6	269.0	1.00	104.44	0.087	228.0705	0.043866	3.3068	0.008669	125.3307	15.66633
	02-20-2016 21	134	147	2460.5	0.4940	1215.5	1.6947	4169.7	252.5	1.00	98.03	0.087	214.0635	0.041172	3.3068	0.008136	117.6335	14.70418
	02-20-2016 22	131	129	2308.0	0.4900	1130.9	1.6832	3884.8	236.8	1.00	91.95	0.087	200.796	0.03862	3.3068	0.007632	110.3426	13.79283
	02-20-2016 23	101	109	1859.3	0.4360	810.7	1.6578	3082.4	190.8	1.00	74.08	0.087	161.7591	0.031112	3.3068	0.006148	88.89084	11.11135
	02-21-2016 00	115	109	2009.8	0.4210	846.1	1.6853	3387.1	206.2	1.00	80.07	0.087	174.8526	0.03363	3.3068	0.006646	96.08606	12.01076
	02-21-2016 01	123	108	2086.0	0.4280	892.8	1.6757	3495.5	214.0	1.00	83.11	0.087	181.482	0.034905	3.3068	0.006898	99.72908	12.46614
	02-21-2016 02	125	109	2108.1	0.4320	910.7	1.6723	3525.3	216.3	1.00	83.99	0.087	183.4047	0.035275	3.3068	0.006971	100.7857	12.59821
	02-21-2016 03	127	108	2106.2	0.4440	935.2	1.6729	3523.5	216.1	1.00	83.91	0.087	183.2394	0.035243	3.3068	0.006965	100.6948	12.58685
	02-21-2016 04	118	113	2080.7	0.4480	932.2	1.6618	3457.7	213.5	1.00	82.90	0.087	181.0209	0.034816	3.3068	0.00688	99.4757	12.43446
	02-21-2016 05	88	98	1654.8	0.4320	714.9	1.5984	2645.0	169.8	1.00	65.93	0.087	143.9676	0.02769	3.3068	0.005472	79.11394	9.889243
	02-21-2016 06	42	98	1282.6	0.4900	628.5	1.5120	1939.3	131.6	1.00	51.10	0.087	111.5862	0.021462	3.3068	0.004241	61.31952	7.66494
	02-21-2016 07	0	113	956.8	0.4900	468.8	1.6222	1552.1	98.2	1.00	38.12	0.087	83.2416	0.01601	3.3068	0.003164	45.74343	5.717928
	02-21-2016 08	0	165	1320.3	0.5030	664.1	1.6586	2189.9	135.5	1.00	52.60	0.087	114.8661	0.022093	3.3068	0.004366	63.12191	7.890239
	02-21-2016 09	0	175	1405.7	0.4960	697.2	1.6516	2321.6	144.2	1.00	56.00	0.087	122.2959	0.023522	3.3068	0.004648	67.20478	8.400598
	02-21-2016 10	0	175	1406.9	0.4910	690.8	1.6662	2344.2	144.3	1.00	56.05	0.087	122.4003	0.023542	3.3068	0.004652	67.26215	8.407769
	02-21-2016 11	0	176	1401.0	0.4950	693.5	1.6858	2361.8	143.7	1.00	55.82	0.087	121.887	0.023443	3.3068	0.004633	66.98008	8.37251
	02-21-2016 12	0	176	1426.2	0.4920	701.7	1.6759	2390.2	146.3	1.00	56.82	0.087	124.0794	0.023865	3.3068	0.004716	68.18486	8.523108
	02-21-2016 13	0	175	1447.2	0.4890	707.7	1.6809	2432.6	148.5	1.00	57.66	0.087	125.9064	0.024216	3.3068	0.004786	69.18884	8.648606
	02-21-2016 14	0	174	1431.9	0.4890	700.2	1.6866	2415.1	146.9	1.00	57.05	0.087	124.5753	0.02396	3.3068	0.004735	68.45737	8.557171
	02-21-2016 15	0	135	1105.2	0.5150	569.2	1.6384	1810.8	113.4	1.00	44.03	0.087	96.1524	0.018493	3.3068	0.003655	52.83825	6.604781
	02-21-2016 16	0	147	1319.2	0.5210	687.3	1.7174	2265.6	135.3	1.00	52.56	0.087	114.7704	0.022074	3.3068	0.004362	63.06932	7.883665
	02-21-2016 17	0	150	1330.2	0.5290	703.7	1.7545	2333.8	136.5	1.00	53.00	0.087	115.7274	0.022258	3.3068	0.004399	63.59522	7.949402
	02-21-2016 18	0	154	1336.9	0.5140	687.2	1.7578	2350.0	137.2	1.00	53.26	0.087	116.3103	0.02237	3.3068	0.004421	63.91554	7.989442
	02-21-2016 19	0	166	1428.2	0.4920	702.7	1.7556	2507.4	146.5	1.00	56.90	0.087	124.2534	0.023898	3.3068	0.004723	68.28048	8.53506
	02-21-2016 20	0	164	1421.8	0.4950	703.8	1.7507	2489.1	145.9	1.00	56.65	0.087	123.6966	0.023791	3.3068	0.004702	67.9745	8.496813
	02-21-2016 21	0	163	1410.3	0.5000	705.2	1.7622	2485.2	144.7	1.00	56.19	0.087	122.6961	0.023599	3.3068	0.004664	67.4247	8.428088
	02-21-2016 22	0	152	1323.1	0.5100	674.8	1.7544	2321.3	135.7	1.00	52.71	0.087	115.1097	0.02214	3.3068	0.004375	63.25578	7.906972
	02-21-2016 23	0	128	1192.4	0.5330	635.5	1.7389	2073.5	122.3	1.00	47.51	0.087	103.7388	0.019953	3.3068	0.003943	57.00717	7.125896
	02-22-2016 00	0	101	998.1	0.5500	549.0	1.7066	1703.4	102.4	1.00	39.76	0.087	86.8347	0.016701	3.3068	0.0033	47.71793	5.964741
	02-22-2016 01	0	100	983.0	0.5380	528.9	1.7120	1682.9	100.9	1.00	39.16	0.087	85.521	0.016449	3.3068	0.003251	46.99602	5.874502
	02-22-2016 02	0	100	973.3	0.5470	532.4	1.6965	1651.2	99.9	1.00	38.78	0.087	84.6771	0.016286	3.3068	0.003218	46.53227	5.816534

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-22-2016 03	0	100	968.4	0.5570	539.4	1.7016	1647.8	99.4	1.00	38.58	0.087	84.2508	0.016204	3.3068	0.003202	46.29801	5.787251
	02-22-2016 04	0	100	975.3	0.5590	545.2	1.6945	1652.6	100.1	1.00	38.86	0.087	84.8511	0.01632	3.3068	0.003225	46.62789	5.828486
	02-22-2016 05	0	120	1149.1	0.5710	656.1	1.7010	1954.6	117.9	1.00	45.78	0.087	99.9717	0.019228	3.3068	0.0038	54.93705	8.667131
	02-22-2016 06	0	130	1194.2	0.5880	702.2	1.7191	2053.0	122.5	1.00	47.58	0.087	103.8954	0.019983	3.3068	0.003949	57.09323	7.136653
	02-22-2016 07	0	171	1496.9	0.5140	769.4	1.7165	2569.5	153.6	1.00	59.64	0.087	130.2303	0.025048	3.3068	0.00495	71.56494	8.945618
	02-22-2016 08	0	175	1515.8	0.5230	792.8	1.7169	2602.5	155.5	1.00	60.39	0.087	131.8746	0.025364	3.3068	0.005012	72.46853	9.058566
	02-22-2016 09	0	175	1505.7	0.5100	767.9	1.7334	2610.0	154.5	1.00	59.99	0.087	130.9959	0.025195	3.3068	0.004979	71.98566	8.998207
	02-22-2016 10	0	175	1515.7	0.4970	753.3	1.7160	2601.0	155.5	1.00	60.39	0.087	131.8659	0.025362	3.3068	0.005012	72.46375	9.057968
	02-22-2016 11	0	175	1505.9	0.5000	753.0	1.7320	2608.2	154.5	1.00	60.00	0.087	131.0133	0.025198	3.3068	0.00498	71.99522	8.999402
	02-22-2016 12	0	175	1497.2	0.5010	750.1	1.7529	2624.4	153.6	1.00	59.65	0.087	130.2564	0.025053	3.3068	0.004951	71.57928	8.94741
	02-22-2016 13	0	175	1500.9	0.4980	747.4	1.7629	2646.0	154.0	1.00	59.80	0.087	130.5783	0.025115	3.3068	0.004963	71.75618	8.969522
	02-22-2016 14	0	171	1486.2	0.5050	750.5	1.7556	2609.1	152.5	1.00	59.21	0.087	129.2994	0.024869	3.3068	0.004915	71.05339	8.881673
	02-22-2016 15	0	154	1372.9	0.5360	735.9	1.7578	2413.3	140.9	1.00	54.70	0.087	119.4423	0.022973	3.3068	0.00454	65.63665	8.904582
	02-22-2016 16	0	150	1347.2	0.5170	696.5	1.7727	2388.2	138.2	1.00	53.67	0.087	117.2064	0.022543	3.3068	0.004455	64.40797	8.050996
	02-22-2016 17	0	169	1479.1	0.4980	736.6	1.7857	2641.3	151.8	1.00	58.93	0.087	128.6817	0.02475	3.3068	0.004891	70.71394	8.839243
	02-22-2016 18	0	175	1502.5	0.5020	754.3	1.7868	2684.6	154.2	1.00	59.86	0.087	130.7175	0.025141	3.3068	0.004968	71.83267	8.979084
	02-22-2016 19	0	175	1509.5	0.5050	762.3	1.7888	2700.2	154.9	1.00	60.14	0.087	131.3265	0.025259	3.3068	0.004992	72.16733	9.020916
	02-22-2016 20	0	175	1508.4	0.5020	757.2	1.7885	2697.7	154.8	1.00	60.10	0.087	131.2308	0.02524	3.3068	0.004988	72.11474	9.014343
	02-22-2016 21	0	170	1487.3	0.5070	754.1	1.7686	2630.5	152.6	1.00	59.25	0.087	129.3951	0.024887	3.3068	0.004918	71.10598	8.888247
	02-22-2016 22	0	153	1374.1	0.5290	726.9	1.7588	2416.8	141.0	1.00	54.75	0.087	119.5467	0.022993	3.3068	0.004544	65.69402	8.211753
	02-22-2016 23	0	142	1302.5	0.5160	672.1	1.7650	2298.9	133.6	1.00	51.89	0.087	113.3175	0.021795	3.3068	0.004307	62.27092	7.783865
	02-23-2016 00	0	115	1099.6	0.5660	622.4	1.7453	1919.1	112.8	1.00	43.81	0.087	95.6652	0.0184	3.3068	0.003636	52.57052	6.571315
	02-23-2016 01	0	103	1013.7	0.5480	555.5	1.7345	1758.3	104.0	1.00	40.39	0.087	88.1919	0.016962	3.3068	0.003352	48.46375	6.057968
	02-23-2016 02	0	105	1018.3	0.5500	560.1	1.7318	1763.5	104.5	1.00	40.57	0.087	88.5921	0.017039	3.3068	0.003367	48.68367	6.085458
	02-23-2016 03	0	103	997.0	0.5650	563.3	1.7217	1716.5	102.3	1.00	39.72	0.087	86.739	0.016683	3.3068	0.003297	47.66534	5.958167
	02-23-2016 04	0	110	1061.2	0.5280	560.3	1.6904	1793.8	108.9	1.00	42.28	0.087	92.3244	0.017757	3.3068	0.003509	50.73466	6.341833
	02-23-2016 05	0	134	1254.5	0.5490	688.7	1.6832	2111.6	128.7	1.00	49.98	0.087	109.1415	0.020992	3.3068	0.004148	59.9761	7.497012
	02-23-2016 06	0	151	1349.6	0.5420	731.5	1.6778	2264.4	138.5	1.00	53.77	0.087	117.4152	0.022583	3.3068	0.004463	64.52271	8.065339
	02-23-2016 07	0	114	1071.3	0.5590	598.9	1.6261	1742.0	109.9	1.00	42.68	0.087	93.2031	0.017926	3.3068	0.003543	51.21753	6.402191
	02-23-2016 08	0	98	963.9	0.5170	498.3	1.5993	1541.6	98.9	1.00	38.40	0.087	83.8593	0.016129	3.3068	0.003187	46.08287	5.760359
	02-23-2016 09	0	98	969.7	0.5210	505.2	1.5900	1541.8	99.5	1.00	38.63	0.087	84.3639	0.016226	3.3068	0.003207	46.36016	5.79502
	02-23-2016 10	0	98	957.8	0.5050	483.7	1.5971	1529.7	98.3	1.00	38.16	0.087	83.3286	0.016027	3.3068	0.003167	45.79124	5.723904
	02-23-2016 11	0	98	963.3	0.4990	480.7	1.5801	1522.1	98.8	1.00	38.38	0.087	83.8071	0.016119	3.3068	0.003185	46.05418	5.756773
	02-23-2016 12	0	98	970.1	0.4830	468.6	1.5529	1506.5	99.5	1.00	38.65	0.087	84.3987	0.016233	3.3068	0.003208	46.37928	5.797471
	02-23-2016 13	0	98	969.8	0.4930	478.1	1.5525	1505.6	99.5	1.00	38.64	0.087	84.3726	0.016228	3.3068	0.003207	46.36494	5.795618
	02-23-2016 14	0	98	965.9	0.4890	472.3	1.5427	1490.1	99.1	1.00	38.48	0.087	84.0333	0.016162	3.3068	0.003194	46.17849	5.772311
	02-23-2016 15	0	98	969.3	0.4880	473.0	1.5360	1488.8	99.4	1.00	38.62	0.087	84.3291	0.016219	3.3068	0.003205	46.34104	5.792629
	02-23-2016 16	0	98	970.9	0.4900	475.7	1.5389	1494.1	99.6	1.00	38.68	0.087	84.4683	0.016246	3.3068	0.003211	46.41753	5.802191
	02-23-2016 17	0	98	962.0	0.4980	479.1	1.5490	1490.1	98.7	1.00	38.33	0.087	83.694	0.016097	3.3068	0.003181	45.99203	5.749004
	02-23-2016 18	0	98	961.2	0.4990	479.6	1.5534	1493.1	98.6	1.00	38.29	0.087	83.6244	0.016084	3.3068	0.003178	45.95378	5.744223
	02-23-2016 19	0	98	961.6	0.4970	477.9	1.5597	1499.8	98.7	1.00	38.31	0.087	83.6592	0.016091	3.3068	0.00318	45.97291	5.746614
	02-23-2016 20	0	98	973.2	0.4870	473.9	1.5455	1504.1	99.8	1.00	38.77	0.087	84.6684	0.016285	3.3068	0.003218	46.52749	5.815936
	02-23-2016 21	0	98	959.9	0.4940	474.2	1.5689	1506.0	98.5	1.00	38.24	0.087	83.5113	0.016062	3.3068	0.003174	45.89163	5.736454
	02-23-2016 22	0	98	971.3	0.4920	477.9	1.5506	1506.1	99.7	1.00	38.70	0.087	84.5031	0.016253	3.3068	0.003212	46.43665	5.804582
	02-23-2016 23	0	98	960.8	0.4890	469.8	1.5568	1495.8	98.6	1.00	38.28	0.087	83.5896	0.016077	3.3068	0.003177	45.93466	5.741833
	02-24-2016 00	0	98	961.8	0.4910	472.2	1.5549	1495.5	98.7	1.00	38.32	0.087	83.6766	0.016094	3.3068	0.00318	45.98247	5.747809
	02-24-2016 01	0	98	964.2	0.4931	475.4	1.5494	1493.9	98.9	1.00	38.41	0.087	83.8854	0.016134	3.3068	0.003188	46.09721	5.762151

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-24-2016 02	0	98	961.9	0.4930	474.2	1.5534	1494.2	98.7	1.00	38.32	0.087	83.6853	0.016096	3.3068	0.003181	45.98725	5.748406
	02-24-2016 03	0	98	965.4	0.4930	475.9	1.5554	1501.6	99.1	1.00	38.46	0.087	83.9898	0.016154	3.3068	0.003192	46.15458	5.769323
	02-24-2016 04	0	98	961.3	0.4990	479.7	1.5608	1500.4	98.6	1.00	38.30	0.087	83.6331	0.016085	3.3068	0.003179	45.95857	5.744821
	02-24-2016 05	0	98	960.4	0.4950	475.4	1.5553	1493.7	98.5	1.00	38.26	0.087	83.5548	0.01607	3.3068	0.003176	45.91554	5.739442
	02-24-2016 06	0	98	964.2	0.4990	481.1	1.5693	1513.1	98.9	1.00	38.41	0.087	83.8854	0.016134	3.3068	0.003188	46.09721	5.762151
	02-24-2016 07	0	98	964.5	0.4970	479.4	1.5650	1509.4	99.0	1.00	38.43	0.087	83.9115	0.016139	3.3068	0.003189	46.11155	5.763944
	02-24-2016 08	0	98	959.4	0.4920	472.0	1.5531	1490.0	98.4	1.00	38.22	0.087	83.4678	0.016054	3.3068	0.003173	45.86773	5.733466
	02-24-2016 09	0	98	869.7	0.4970	432.2	1.5876	1380.7	89.2	1.00	34.65	0.087	75.6639	0.014553	3.3068	0.002876	41.57928	5.19741
	02-24-2016 10	0	98	876.5	0.4840	424.2	1.5788	1383.8	89.9	1.00	34.92	0.087	76.2555	0.014667	3.3068	0.002898	41.90438	5.238048
	02-24-2016 11	0	98	884.2	0.4730	418.2	1.5826	1399.3	90.7	1.00	35.23	0.087	76.9254	0.014795	3.3068	0.002924	42.27251	5.284064
	02-24-2016 12	0	98	880.0	0.4750	418.0	1.5919	1400.9	90.3	1.00	35.06	0.087	76.56	0.014725	3.3068	0.00291	42.07171	5.258964
	02-24-2016 13	0	98	882.7	0.4800	423.7	1.5971	1409.8	90.6	1.00	35.17	0.087	76.7949	0.01477	3.3068	0.002919	42.2008	5.2751
	02-24-2016 14	0	98	880.2	0.4790	421.6	1.6108	1417.8	90.3	1.00	35.07	0.087	76.5774	0.014728	3.3068	0.002911	42.08127	5.260159
	02-24-2016 15	0	98	874.5	0.4850	424.1	1.6204	1417.0	89.7	1.00	34.84	0.087	76.0815	0.014633	3.3068	0.002892	41.80876	5.226096
	02-24-2016 16	0	98	874.4	0.4870	425.8	1.6074	1405.5	89.7	1.00	34.84	0.087	76.0728	0.014631	3.3068	0.002891	41.80398	5.225498
	02-24-2016 17	0	98	867.0	0.4900	424.8	1.6245	1408.4	89.0	1.00	34.54	0.087	75.429	0.014508	3.3068	0.002867	41.4502	5.181275
	02-24-2016 18	0	98	870.0	0.4910	427.2	1.6254	1414.1	89.3	1.00	34.66	0.087	75.69	0.014558	3.3068	0.002877	41.59363	5.199203
	02-24-2016 19	0	98	936.8	0.4760	445.9	1.6065	1505.0	96.1	1.00	37.32	0.087	81.5016	0.015676	3.3068	0.003098	44.78725	5.598406
	02-24-2016 20	0	98	933.1	0.4810	448.8	1.6188	1510.5	95.7	1.00	37.18	0.087	81.1797	0.015614	3.3068	0.003086	44.61036	5.576295
	02-24-2016 21	0	98	940.4	0.4850	456.1	1.6204	1523.8	96.5	1.00	37.47	0.087	81.8148	0.015736	3.3068	0.00311	44.95936	5.61992
	02-24-2016 22	0	98	957.0	0.4820	461.3	1.6120	1542.7	98.2	1.00	38.13	0.087	83.259	0.016014	3.3068	0.003165	45.75299	5.719124
	02-24-2016 23	0	98	958.7	0.4880	467.8	1.6067	1540.3	98.4	1.00	38.20	0.087	83.4069	0.016042	3.3068	0.00317	45.83426	5.729283
	02-25-2016 00	0	98	951.6	0.4870	463.4	1.6358	1556.6	97.6	1.00	37.91	0.087	82.7892	0.015923	3.3068	0.003147	45.49482	5.686853
	02-25-2016 01	0	98	956.3	0.4870	465.7	1.6342	1562.8	98.1	1.00	38.10	0.087	83.1981	0.016002	3.3068	0.003162	45.71952	5.71494
	02-25-2016 02	0	98	962.6	0.4860	467.8	1.6265	1565.7	98.8	1.00	38.35	0.087	83.7462	0.016107	3.3068	0.003183	46.02072	5.75259
	02-25-2016 03	0	98	959.2	0.4900	470.0	1.6231	1556.9	98.4	1.00	38.22	0.087	83.4504	0.01605	3.3068	0.003172	45.85817	5.732271
	02-25-2016 04	0	98	954.0	0.4990	476.0	1.6313	1556.3	97.9	1.00	38.01	0.087	82.998	0.015963	3.3068	0.003155	45.60956	5.701195
	02-25-2016 05	0	98	951.7	0.4900	466.3	1.6344	1555.5	97.6	1.00	37.92	0.087	82.7979	0.015925	3.3068	0.003147	45.4996	5.68745
	02-25-2016 06	0	98	952.8	0.4920	468.8	1.6516	1573.6	97.8	1.00	37.96	0.087	82.8936	0.015943	3.3068	0.003151	45.55219	5.694024
	02-25-2016 07	0	98	955.4	0.4930	471.0	1.6543	1580.5	98.0	1.00	38.06	0.087	83.1198	0.015987	3.3068	0.003159	45.67649	5.709562
	02-25-2016 08	0	98	954.0	0.4930	470.3	1.6579	1581.6	97.9	1.00	38.01	0.087	82.998	0.015963	3.3068	0.003155	45.60956	5.701195
	02-25-2016 09	0	99	953.9	0.4920	469.3	1.6594	1582.9	97.9	1.00	38.00	0.087	82.9893	0.015962	3.3068	0.003154	45.60478	5.700598
	02-25-2016 10	0	104	996.7	0.5820	580.1	1.6686	1663.1	102.3	1.00	39.71	0.087	86.7129	0.016678	3.3068	0.003296	47.651	5.956375
	02-25-2016 11	0	99	957.7	0.5980	572.7	1.6744	1603.6	98.3	1.00	38.16	0.087	83.3199	0.016025	3.3068	0.003167	45.78645	5.723307
	02-25-2016 12	0	98	958.3	0.6040	578.8	1.6644	1595.0	98.3	1.00	38.18	0.087	83.3721	0.016035	3.3068	0.003169	45.81514	5.726892
	02-25-2016 13	0	99	953.5	0.6100	581.6	1.6725	1594.7	97.8	1.00	37.99	0.087	82.9545	0.015955	3.3068	0.003153	45.58566	5.698207
	02-25-2016 14	0	100	973.1	0.6030	586.8	1.6607	1616.0	99.8	1.00	38.77	0.087	84.6597	0.016283	3.3068	0.003218	46.52271	5.815339
	02-25-2016 15	0	100	969.0	0.6100	591.1	1.6664	1614.7	99.4	1.00	38.61	0.087	84.303	0.016214	3.3068	0.003204	46.32669	5.790837
	02-25-2016 16	0	100	968.8	0.6060	587.1	1.6659	1613.9	99.4	1.00	38.60	0.087	84.2856	0.016211	3.3068	0.003204	46.31713	5.789641
	02-25-2016 17	0	100	977.7	0.6000	586.6	1.6514	1614.6	100.3	1.00	38.95	0.087	85.0599	0.01636	3.3068	0.003233	46.74263	5.842829
	02-25-2016 18	0	100	967.2	0.6020	582.3	1.6592	1604.8	99.2	1.00	38.53	0.087	84.1464	0.016184	3.3068	0.003198	46.24064	5.78008
	02-25-2016 19	0	100	980.7	0.6010	589.4	1.6505	1618.6	100.6	1.00	39.07	0.087	85.3209	0.01641	3.3068	0.003243	46.88606	5.860757
	02-25-2016 20	0	100	978.0	0.6010	587.8	1.6589	1622.4	100.3	1.00	38.96	0.087	85.086	0.016365	3.3068	0.003234	46.75697	5.844622
	02-25-2016 21	0	100	980.7	0.5980	586.5	1.6566	1624.6	100.6	1.00	39.07	0.087	85.3209	0.01641	3.3068	0.003243	46.88606	5.860757
	02-25-2016 22	0	100	968.3	0.6050	585.8	1.6795	1626.3	99.3	1.00	38.58	0.087	84.2421	0.016203	3.3068	0.003202	46.29323	5.786653
	02-25-2016 23	0	100	971.0	0.5990	581.6	1.6749	1626.3	99.6	1.00	38.69	0.087	84.477	0.016248	3.3068	0.003211	46.42231	5.802789
	02-26-2016 00	0	100	975.2	0.5940	579.3	1.6704	1629.0	100.1	1.00	38.85	0.087	84.8424	0.016318	3.3068	0.003225	46.62311	5.827888

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-26-2016 01	0	100	976.9	0.5940	580.3	1.6759	1637.2	100.2	1.00	38.92	0.087	84.9903	0.016347	3.3068	0.00323	46.70438	5.838048
	02-26-2016 02	0	100	981.4	0.5910	580.0	1.6737	1642.6	100.7	1.00	39.10	0.087	85.3818	0.016422	3.3068	0.003245	46.91952	5.86494
	02-26-2016 03	0	100	973.4	0.5990	583.1	1.6916	1646.6	99.9	1.00	38.78	0.087	84.6858	0.016288	3.3068	0.003219	46.53705	5.817131
	02-26-2016 04	0	100	975.2	0.5980	583.2	1.6924	1650.4	100.1	1.00	38.85	0.087	84.8424	0.016318	3.3068	0.003225	46.62311	5.827888
	02-26-2016 05	0	100	974.1	0.5910	575.7	1.6753	1631.9	99.9	1.00	38.81	0.087	84.7467	0.0163	3.3068	0.003221	46.57052	5.821315
	02-26-2016 06	0	100	978.5	0.5980	585.1	1.6797	1643.6	100.4	1.00	38.98	0.087	85.1295	0.016373	3.3068	0.003236	46.78088	5.84761
	02-26-2016 07	0	100	976.9	0.5970	583.2	1.6833	1644.4	100.2	1.00	38.92	0.087	84.9903	0.016347	3.3068	0.00323	46.70438	5.838048
	02-26-2016 08	0	103	992.5	0.5930	588.6	1.6952	1682.5	101.8	1.00	39.54	0.087	86.3475	0.016608	3.3068	0.003282	47.4502	5.931275
	02-26-2016 09	0	153	1372.3	0.5370	736.9	1.7039	2338.3	140.8	1.00	54.67	0.087	119.3901	0.022963	3.3068	0.004538	65.60797	8.200996
	02-26-2016 10	0	163	1413.8	0.5560	786.1	1.7077	2414.4	145.1	1.00	56.33	0.087	123.0006	0.023657	3.3068	0.004675	67.59203	8.449004
	02-26-2016 11	0	161	1412.2	0.5370	758.4	1.7015	2402.8	144.9	1.00	56.26	0.087	122.8614	0.02363	3.3068	0.00467	67.51554	8.439442
	02-26-2016 12	0	160	1391.2	0.5390	749.9	1.7200	2392.9	142.7	1.00	55.43	0.087	121.0344	0.023279	3.3068	0.0046	66.51155	8.313944
	02-26-2016 13	0	159	1373.4	0.5310	729.3	1.7228	2366.1	140.9	1.00	54.72	0.087	119.4858	0.022981	3.3068	0.004542	65.66056	8.20757
	02-26-2016 14	0	157	1368.7	0.5270	721.3	1.7180	2351.4	140.4	1.00	54.53	0.087	119.0769	0.022903	3.3068	0.004526	65.43586	8.179482
	02-26-2016 15	0	157	1358.0	0.5210	707.5	1.7345	2355.4	139.3	1.00	54.10	0.087	118.146	0.022724	3.3068	0.004491	64.9243	8.115538
	02-26-2016 16	0	156	1359.4	0.5250	713.7	1.7419	2367.9	139.5	1.00	54.16	0.087	118.2678	0.022747	3.3068	0.004495	64.99124	8.123904
	02-26-2016 17	0	155	1363.2	0.5290	721.1	1.7400	2372.0	139.9	1.00	54.31	0.087	118.5984	0.022811	3.3068	0.004508	65.17291	8.146614
	02-26-2016 18	0	156	1354.5	0.5300	717.9	1.7573	2380.2	139.0	1.00	53.96	0.087	117.8415	0.022665	3.3068	0.004479	64.75697	8.094622
	02-26-2016 19	0	156	1364.3	0.5310	724.4	1.7568	2396.8	140.0	1.00	54.35	0.087	118.6941	0.022829	3.3068	0.004511	65.2255	8.153187
	02-26-2016 20	0	157	1386.1	0.5160	715.2	1.7285	2395.9	142.2	1.00	55.22	0.087	120.5907	0.023194	3.3068	0.004584	66.26773	8.283466
	02-26-2016 21	0	158	1390.4	0.5160	717.4	1.7186	2389.5	142.7	1.00	55.39	0.087	120.9648	0.023266	3.3068	0.004598	66.47331	8.309163
	02-26-2016 22	0	159	1393.7	0.5160	719.1	1.7022	2372.3	143.0	1.00	55.53	0.087	121.2519	0.023321	3.3068	0.004609	66.63108	8.328884
	02-26-2016 23	0	159	1399.1	0.5130	717.7	1.6990	2377.1	143.6	1.00	55.74	0.087	121.7217	0.023411	3.3068	0.004627	66.88924	8.361155
	02-27-2016 00	0	159	1386.0	0.5220	723.5	1.7124	2373.4	142.2	1.00	55.22	0.087	120.582	0.023192	3.3068	0.004583	66.26295	8.282869
	02-27-2016 01	0	159	1386.2	0.5190	719.4	1.7110	2371.8	142.2	1.00	55.23	0.087	120.5994	0.023195	3.3068	0.004584	66.27251	8.284064
	02-27-2016 02	0	159	1405.1	0.5160	725.0	1.6978	2385.6	144.2	1.00	55.98	0.087	122.2437	0.023512	3.3068	0.004646	67.1761	8.397012
	02-27-2016 03	0	118	1070.0	0.5600	599.2	1.7265	1847.4	109.8	1.00	42.63	0.087	93.09	0.017904	3.3068	0.003538	51.15538	6.394422
	02-27-2016 04	0	95	911.4	0.6390	582.4	1.7057	1554.6	93.5	1.00	36.31	0.087	79.2918	0.015251	3.3068	0.003014	43.57291	5.446614
	02-27-2016 05	0	119	1130.3	0.5950	672.5	1.7001	1921.6	116.0	1.00	45.03	0.087	98.3361	0.018913	3.3068	0.003738	54.03825	6.754781
	02-27-2016 06	0	157	1377.4	0.5080	699.7	1.7153	2362.6	141.3	1.00	54.88	0.087	119.8338	0.023048	3.3068	0.004555	65.85179	8.231474
	02-27-2016 07	0	157	1377.3	0.5120	705.2	1.7369	2392.2	141.3	1.00	54.87	0.087	119.8251	0.023046	3.3068	0.004554	65.84701	8.230876
	02-27-2016 08	0	160	1387.1	0.5130	711.6	1.7428	2417.4	142.3	1.00	55.26	0.087	120.6777	0.02321	3.3068	0.004587	66.31554	8.289442
	02-27-2016 09	0	159	1387.4	0.5200	721.4	1.7417	2416.4	142.3	1.00	55.27	0.087	120.7038	0.023215	3.3068	0.004588	66.32988	8.291235
	02-27-2016 10	0	157	1373.2	0.5250	720.9	1.7636	2421.8	140.9	1.00	54.71	0.087	119.4684	0.022978	3.3068	0.004541	65.651	8.206375
	02-27-2016 11	0	164	1416.7	0.4850	687.1	1.7351	2458.1	145.4	1.00	56.44	0.087	123.2529	0.023706	3.3068	0.004685	67.73068	8.466335
	02-27-2016 12	0	164	1413.7	0.5090	719.6	1.7107	2418.4	145.0	1.00	56.32	0.087	122.9919	0.023656	3.3068	0.004675	67.58725	8.448406
	02-27-2016 13	0	163	1413.3	0.5180	732.1	1.6966	2397.8	145.0	1.00	56.31	0.087	122.9571	0.023649	3.3068	0.004673	67.56813	8.446016
	02-27-2016 14	0	163	1408.0	0.5220	735.0	1.7066	2402.9	144.5	1.00	56.10	0.087	122.496	0.02356	3.3068	0.004656	67.31474	8.414343
	02-27-2016 15	0	163	1413.5	0.5180	732.2	1.7121	2420.1	145.0	1.00	56.31	0.087	122.9745	0.023652	3.3068	0.004674	67.57769	8.447211
	02-27-2016 16	0	155	1366.1	0.5240	715.8	1.7080	2333.3	140.2	1.00	54.43	0.087	118.8507	0.022859	3.3068	0.004517	65.31155	8.163944
	02-27-2016 17	0	145	1297.8	0.5520	716.4	1.7130	2223.1	133.2	1.00	51.71	0.087	112.9086	0.021716	3.3068	0.004292	62.04622	7.755777
	02-27-2016 18	0	147	1295.8	0.5590	724.4	1.7156	2223.1	132.9	1.00	51.63	0.087	112.7346	0.021683	3.3068	0.004285	61.9506	7.743825
	02-27-2016 19	0	141	1284.6	0.5200	668.0	1.7174	2206.2	131.8	1.00	51.18	0.087	111.7602	0.021495	3.3068	0.004248	61.41514	7.676892
	02-27-2016 20	0	139	1271.4	0.5830	741.2	1.7100	2174.1	130.4	1.00	50.65	0.087	110.6118	0.021274	3.3068	0.004204	60.78406	7.598008
	02-27-2016 21	0	147	1314.5	0.5260	691.4	1.7204	2261.5	134.9	1.00	52.37	0.087	114.3615	0.021996	3.3068	0.004347	62.84462	7.855578
	02-27-2016 22	0	149	1320.8	0.5280	697.4	1.7521	2314.2	135.5	1.00	52.62	0.087	114.9096	0.022101	3.3068	0.004368	63.14582	7.893227
	02-27-2016 23	0	160	1410.9	0.5050	712.5	1.7442	2460.9	144.8	1.00	56.21	0.087	122.7483	0.023609	3.3068	0.004666	67.45339	8.431673

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-28-2016 00	0	154	1351.9	0.5270	712.5	1.7349	2345.4	138.7	1.00	53.86	0.087	117.6153	0.022621	3.3068	0.00447	64.63267	8.079084
	02-28-2016 01	0	105	990.1	0.5340	528.7	1.7381	1720.9	101.6	1.00	39.45	0.087	86.1387	0.016567	3.3068	0.003274	47.33546	5.916932
	02-28-2016 02	0	98	959.9	0.5840	560.6	1.7031	1634.8	98.5	1.00	38.24	0.087	83.5113	0.016062	3.3068	0.003174	45.89163	5.736454
	02-28-2016 03	0	98	952.7	0.6250	595.4	1.6951	1614.9	97.7	1.00	37.96	0.087	82.8849	0.015942	3.3068	0.00315	45.54741	5.693426
	02-28-2016 04	0	98	946.9	0.6330	599.4	1.6973	1607.2	97.1	1.00	37.73	0.087	82.3803	0.015845	3.3068	0.003131	45.27012	5.658765
	02-28-2016 05	0	122	1172.6	0.5650	662.5	1.6956	1988.3	120.3	1.00	46.72	0.087	102.0162	0.019621	3.3068	0.003878	56.06056	7.00757
	02-28-2016 06	0	140	1261.3	0.5480	691.2	1.7511	2208.6	129.4	1.00	50.25	0.087	109.7331	0.021105	3.3068	0.004171	60.3012	7.537649
	02-28-2016 07	0	139	1258.6	0.5130	645.7	1.7621	2217.8	129.1	1.00	50.14	0.087	109.4982	0.02106	3.3068	0.004162	60.17211	7.521514
	02-28-2016 08	0	149	1319.8	0.5090	671.8	1.7632	2327.1	135.4	1.00	52.58	0.087	114.8226	0.022084	3.3068	0.004364	63.09801	7.887251
	02-28-2016 09	0	155	1367.0	0.4940	675.3	1.7445	2384.7	140.3	1.00	54.46	0.087	118.929	0.022874	3.3068	0.00452	65.35458	8.169323
	02-28-2016 10	0	132	1205.5	0.5260	634.1	1.7579	2119.2	123.7	1.00	48.03	0.087	104.8785	0.020172	3.3068	0.003986	57.63347	7.204183
	02-28-2016 11	0	108	1020.5	0.6200	632.7	1.7619	1798.0	104.7	1.00	40.66	0.087	88.7835	0.017076	3.3068	0.003375	48.78884	6.098606
	02-28-2016 12	0	103	998.8	0.6290	628.2	1.7389	1736.8	102.5	1.00	39.79	0.087	86.8956	0.016713	3.3068	0.003303	47.75139	5.968924
	02-28-2016 13	0	103	993.0	0.6390	634.5	1.7552	1742.9	101.9	1.00	39.56	0.087	86.391	0.016616	3.3068	0.003284	47.4741	5.934263
	02-28-2016 14	0	103	996.1	0.6520	649.5	1.7611	1754.2	102.2	1.00	39.69	0.087	86.6607	0.016668	3.3068	0.003294	47.62231	5.952789
	02-28-2016 15	0	103	995.7	0.6600	657.2	1.7629	1755.3	102.2	1.00	39.67	0.087	86.6259	0.016661	3.3068	0.003293	47.60319	5.950398
	02-28-2016 16	0	103	996.6	0.6660	663.7	1.7513	1745.3	102.3	1.00	39.71	0.087	86.7042	0.016676	3.3068	0.003296	47.64622	5.955777
	02-28-2016 17	0	103	995.5	0.6530	650.1	1.7587	1750.8	102.1	1.00	39.66	0.087	86.6085	0.016658	3.3068	0.003292	47.59363	5.949203
	02-28-2016 18	0	113	1083.7	0.6250	677.3	1.7607	1908.1	111.2	1.00	43.18	0.087	94.2819	0.018134	3.3068	0.003584	51.81036	6.476295
	02-28-2016 19	0	164	1422.7	0.5760	819.5	1.7824	2535.8	146.0	1.00	56.68	0.087	123.7749	0.023806	3.3068	0.004705	68.01753	8.502191
	02-28-2016 20	0	140	1249.2	0.6110	763.3	1.7750	2217.3	128.2	1.00	49.77	0.087	108.6804	0.020903	3.3068	0.004131	59.72271	7.465339
	02-28-2016 21	0	101	972.7	0.5400	525.3	1.7544	1706.5	99.8	1.00	38.75	0.087	84.6249	0.016276	3.3068	0.003216	46.50359	5.812948
	02-28-2016 22	0	98	954.3	0.5300	505.8	1.7644	1683.8	97.9	1.00	38.02	0.087	83.0241	0.015968	3.3068	0.003156	45.6239	5.702988
	02-28-2016 23	0	98	954.7	0.5400	515.5	1.7594	1679.7	98.0	1.00	38.04	0.087	83.0589	0.015975	3.3068	0.003157	45.64303	5.705378
	02-29-2016 00	0	98	955.0	0.5470	522.4	1.7574	1678.3	98.0	1.00	38.05	0.087	83.085	0.01598	3.3068	0.003158	45.65737	5.707171
	02-29-2016 01	0	98	948.1	0.5460	517.7	1.7790	1686.7	97.3	1.00	37.77	0.087	82.4847	0.015865	3.3068	0.003135	45.32749	5.665936
	02-29-2016 02	0	97	951.1	0.5480	521.2	1.7684	1681.9	97.6	1.00	37.89	0.087	82.7457	0.015915	3.3068	0.003145	45.47092	5.683865
	02-29-2016 03	0	98	960.4	0.5291	508.1	1.7568	1687.2	98.5	1.00	38.26	0.087	83.5548	0.01607	3.3068	0.003176	45.91554	5.739442
	02-29-2016 04	0	98	956.6	0.5390	515.6	1.7688	1692.0	98.1	1.00	38.11	0.087	83.2242	0.016007	3.3068	0.003163	45.73386	5.716733
	02-29-2016 05	0	99	972.0	0.5350	520.0	1.7449	1696.0	99.7	1.00	38.73	0.087	84.564	0.016265	3.3068	0.003214	46.47012	5.808765
	02-29-2016 06	0	151	1343.0	0.5540	744.0	1.7798	2390.3	137.8	1.00	53.51	0.087	116.841	0.022473	3.3068	0.004441	64.20717	8.025896
	02-29-2016 07	0	172	1490.9	0.5630	839.4	1.7945	2675.4	153.0	1.00	59.40	0.087	129.7083	0.024947	3.3068	0.00493	71.27809	8.909761
	02-29-2016 08	0	173	1484.8	0.5400	801.8	1.8183	2699.8	152.3	1.00	59.16	0.087	129.1776	0.024845	3.3068	0.00491	70.98645	8.873307
	02-29-2016 09	0	172	1492.3	0.5220	779.0	1.8211	2717.6	153.1	1.00	59.45	0.087	129.8301	0.024971	3.3068	0.004935	71.34502	8.918127
	02-29-2016 10	0	162	1414.9	0.5430	768.3	1.8370	2599.2	145.2	1.00	56.37	0.087	123.0963	0.023676	3.3068	0.004679	67.64462	8.455578
	02-29-2016 11	0	160	1388.7	0.5400	749.9	1.8714	2598.8	142.5	1.00	55.33	0.087	120.8169	0.023237	3.3068	0.004592	66.39203	8.299004
	02-29-2016 12	0	150	1325.5	0.5470	725.0	1.8943	2510.9	136.0	1.00	52.81	0.087	115.3185	0.02218	3.3068	0.004383	63.37052	7.921315
	02-29-2016 13	0	169	1459.4	0.5290	772.0	1.9229	2806.3	149.7	1.00	58.14	0.087	126.9678	0.02442	3.3068	0.004826	69.77211	8.721514
	02-29-2016 14	0	171	1470.5	0.5390	792.6	1.9422	2856.0	150.9	1.00	58.59	0.087	127.9335	0.024606	3.3068	0.004863	70.30279	8.787849
	02-29-2016 15	0	155	1354.8	0.5600	758.7	1.9339	2620.1	139.0	1.00	53.98	0.087	117.8676	0.02267	3.3068	0.00448	64.77131	8.096414
	02-29-2016 16	0	157	1383.3	0.5430	751.1	1.8964	2623.3	141.9	1.00	55.11	0.087	120.3471	0.023147	3.3068	0.004574	66.13386	8.266733
	02-29-2016 17	0	172	1484.8	0.5260	781.0	1.9040	2827.0	152.3	1.00	59.16	0.087	129.1776	0.024845	3.3068	0.00491	70.98645	8.873307
	02-29-2016 18	0	173	1495.0	0.5300	792.4	1.8843	2817.1	153.4	1.00	59.56	0.087	130.065	0.025016	3.3068	0.004944	71.4741	8.934263
	02-29-2016 19	0	172	1485.9	0.5390	800.9	1.8972	2819.0	152.4	1.00	59.20	0.087	129.2733	0.024864	3.3068	0.004914	71.03904	8.87988
	02-29-2016 20	0	169	1470.6	0.5420	797.1	1.8851	2772.3	150.9	1.00	58.59	0.087	127.9422	0.024608	3.3068	0.004863	70.30757	8.788446
	02-29-2016 21	0	160	1402.3	0.5430	761.4	1.8949	2657.2	143.9	1.00	55.87	0.087	122.0001	0.023465	3.3068	0.004637	67.04223	8.380279
	02-29-2016 22	0	160	1402.3	0.5420	760.0	1.9004	2664.9	143.9	1.00	55.87	0.087	122.0001	0.023465	3.3068	0.004637	67.04223	8.380279

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-29-2016 23	0	145	1291.5	0.5470	706.5	1.8870	2437.1	132.5	1.00	51.45	0.087	112.3605	0.021611	3.3068	0.004271	61.74502	7.718127
	03-01-2016 00	0	118	1120.8	0.4630	518.9	1.8653	2090.6	115.0	1.00	44.65	0.087	97.5096	0.018754	3.3068	0.003706	53.58406	6.698008
	03-01-2016 01	0	119	1113.1	0.4580	509.8	1.8861	2099.4	114.2	1.00	44.35	0.087	96.8397	0.018626	3.3068	0.003681	53.21594	6.651992
	03-01-2016 02	0	129	1177.1	0.5130	603.9	1.8845	2218.3	120.8	1.00	46.90	0.087	102.4077	0.019696	3.3068	0.003892	56.2757	7.034462
	03-01-2016 03	0	114	1082.0	0.5280	571.3	1.8472	1998.7	111.0	1.00	43.11	0.087	94.134	0.018105	3.3068	0.003578	51.72908	6.466135
	03-01-2016 04	0	109	1030.9	0.4980	513.4	1.8513	1908.5	105.8	1.00	41.07	0.087	89.6883	0.01725	3.3068	0.003409	49.28606	6.160757
	03-01-2016 05	0	128	1193.6	0.5200	620.7	1.8645	2225.5	122.5	1.00	47.55	0.087	103.8432	0.019973	3.3068	0.003947	57.06454	7.133068
	03-01-2016 06	0	172	1466.5	0.5440	797.8	1.8558	2721.5	150.5	1.00	58.43	0.087	127.5855	0.024539	3.3068	0.004849	70.11155	8.763944
	03-01-2016 07	0	172	1428.6	0.5450	778.6	1.8645	2663.6	146.6	1.00	56.92	0.087	124.2882	0.023905	3.3068	0.004724	68.2996	8.53745
	03-01-2016 08	0	171	1429.9	0.5180	740.7	1.8569	2655.2	146.7	1.00	56.97	0.087	124.4013	0.023927	3.3068	0.004728	68.36175	8.545219
	03-01-2016 09	0	171	1432.1	0.5080	727.5	1.8664	2672.9	146.9	1.00	57.06	0.087	124.5927	0.023963	3.3068	0.004736	68.46693	8.558367
	03-01-2016 10	0	166	1395.9	0.5130	716.1	1.8674	2606.7	143.2	1.00	55.61	0.087	121.4433	0.023358	3.3068	0.004616	66.73625	8.342032
	03-01-2016 11	0	161	1373.5	0.4980	684.0	1.8740	2574.0	140.9	1.00	54.72	0.087	119.4945	0.022983	3.3068	0.004542	65.66534	8.268167
	03-01-2016 12	0	165	1387.9	0.5080	705.1	1.8799	2609.1	142.4	1.00	55.29	0.087	120.7473	0.023224	3.3068	0.004589	66.35378	8.294223
	03-01-2016 13	0	154	1310.4	0.5050	661.8	1.8584	2435.3	134.4	1.00	52.21	0.087	114.0048	0.021927	3.3068	0.004333	62.64861	7.831076
	03-01-2016 14	0	138	1193.1	0.5030	600.1	1.8646	2224.7	122.4	1.00	47.53	0.087	103.7997	0.019964	3.3068	0.003945	57.04064	7.13008
	03-01-2016 15	0	127	1126.9	0.5290	596.1	1.8400	2073.5	115.6	1.00	44.90	0.087	98.0403	0.018856	3.3068	0.003726	53.8757	6.734462
	03-01-2016 16	0	144	1248.5	0.5220	651.7	1.8458	2304.5	128.1	1.00	49.74	0.087	108.6195	0.020891	3.3068	0.004129	59.68924	7.461155
	03-01-2016 17	0	164	1394.8	0.5110	712.7	1.8446	2572.8	143.1	1.00	55.57	0.087	121.3476	0.023339	3.3068	0.004612	66.68367	8.335458
	03-01-2016 18	0	170	1418.1	0.5320	754.4	1.8310	2596.5	145.5	1.00	56.50	0.087	123.3747	0.023729	3.3068	0.004689	67.79761	8.474701
	03-01-2016 19	0	166	1386.3	0.5420	751.4	1.8153	2516.5	142.2	1.00	55.23	0.087	120.6081	0.023197	3.3068	0.004584	66.27729	8.284661
	03-01-2016 20	0	170	1426.6	0.4960	707.6	1.8212	2598.1	146.4	1.00	56.84	0.087	124.1142	0.023871	3.3068	0.004717	68.20398	8.525498
	03-01-2016 21	0	164	1375.6	0.5340	734.6	1.8181	2501.0	141.1	1.00	54.80	0.087	119.6772	0.023018	3.3068	0.004549	65.76574	8.220717
	03-01-2016 22	0	148	1264.2	0.5570	704.2	1.8115	2290.1	129.7	1.00	50.37	0.087	109.9854	0.021154	3.3068	0.004418	60.43984	7.55498
	03-01-2016 23	0	161	1348.8	0.5490	740.5	1.8149	2448.0	138.4	1.00	53.74	0.087	117.3456	0.02257	3.3068	0.00446	64.48446	8.060558
	03-02-2016 00	0	143	1208.3	0.5720	691.1	1.8001	2175.1	124.0	1.00	48.14	0.087	105.1221	0.020219	3.3068	0.003996	57.76733	7.220916
	03-02-2016 01	0	106	947.4	0.5160	488.9	1.7967	1702.2	97.2	1.00	37.75	0.087	82.4238	0.015853	3.3068	0.003133	45.29402	5.661753
	03-02-2016 02	0	98	892.6	0.5010	447.2	1.7939	1601.2	91.6	1.00	35.56	0.087	77.6562	0.014936	3.3068	0.002952	42.6741	5.334263
	03-02-2016 03	0	98	883.1	0.5080	448.6	1.7939	1584.2	90.6	1.00	35.18	0.087	76.8297	0.014777	3.3068	0.00292	42.21992	5.27749
	03-02-2016 04	0	104	925.6	0.5260	486.9	1.7854	1652.6	95.0	1.00	36.88	0.087	80.5272	0.015488	3.3068	0.003061	44.25179	5.531474
	03-02-2016 05	0	144	1277.1	0.5540	707.5	1.7650	2254.1	131.0	1.00	50.88	0.087	111.1077	0.02137	3.3068	0.004223	61.05657	7.632072
	03-02-2016 06	0	171	1476.1	0.5630	831.0	1.7686	2610.7	151.4	1.00	58.81	0.087	128.4207	0.0247	3.3068	0.004881	70.57052	8.821315
	03-02-2016 07	0	170	1463.7	0.5600	819.7	1.7703	2591.2	150.2	1.00	58.31	0.087	127.3419	0.024492	3.3068	0.00484	69.97769	8.747211
	03-02-2016 08	0	158	1370.5	0.5710	782.6	1.7694	2424.9	140.6	1.00	54.60	0.087	119.2335	0.022933	3.3068	0.004532	65.52191	8.190239
	03-02-2016 09	0	166	1437.5	0.5300	761.9	1.7662	2538.9	147.5	1.00	57.27	0.087	125.0625	0.024054	3.3068	0.004753	68.7251	8.590637
	03-02-2016 10	0	168	1445.8	0.5310	767.7	1.7695	2558.3	148.3	1.00	57.60	0.087	125.7846	0.024193	3.3068	0.004781	69.12191	8.640239
	03-02-2016 11	0	167	1433.5	0.5270	755.5	1.7632	2527.5	147.1	1.00	57.11	0.087	124.7145	0.023987	3.3068	0.00474	68.53386	8.566733
	03-02-2016 12	0	167	1438.7	0.5330	766.8	1.7536	2522.9	147.6	1.00	57.32	0.087	125.1669	0.024074	3.3068	0.004757	68.78247	8.597809
	03-02-2016 13	0	167	1443.1	0.5330	769.2	1.7437	2516.3	148.1	1.00	57.49	0.087	125.5497	0.024147	3.3068	0.004772	68.99283	8.624104
	03-02-2016 14	0	167	1438.9	0.5270	758.3	1.7413	2505.5	147.6	1.00	57.33	0.087	125.1843	0.024077	3.3068	0.004758	68.79203	8.599004
	03-02-2016 15	0	154	1352.1	0.5510	745.0	1.7167	2321.2	138.7	1.00	53.87	0.087	117.6327	0.022625	3.3068	0.004471	64.64223	8.080279
	03-02-2016 16	0	165	1428.3	0.5380	768.4	1.7186	2454.7	146.5	1.00	56.90	0.087	124.2621	0.0239	3.3068	0.004723	68.28526	8.535657
	03-02-2016 17	0	165	1421.5	0.5460	776.1	1.7138	2436.1	145.9	1.00	56.63	0.087	123.6705	0.023786	3.3068	0.004701	67.96016	8.49502
	03-02-2016 18	0	165	1424.7	0.5410	770.8	1.6985	2419.8	146.2	1.00	56.76	0.087	123.9489	0.02384	3.3068	0.004711	68.11315	8.514143
	03-02-2016 19	0	164	1425.5	0.5380	766.9	1.6994	2422.5	146.3	1.00	56.79	0.087	124.0185	0.023853	3.3068	0.004714	68.15139	8.518924
	03-02-2016 20	0	164	1426.4	0.5350	763.1	1.6941	2416.4	146.4	1.00	56.83	0.087	124.0968	0.023868	3.3068	0.004717	68.19442	8.524303
	03-02-2016 21	0	164	1426.9	0.5290	754.8	1.6961	2420.1	146.4	1.00	56.85	0.087	124.1403	0.023876	3.3068	0.004718	68.21833	8.527291

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-02-2016 22	0	165	1448.2	0.5200	753.1	1.6760	2427.2	148.5	1.00	57.70	0.087	125.9934	0.024233	3.3068	0.004789	69.23665	8.654582
	03-02-2016 23	0	166	1436.6	0.5290	760.0	1.6854	2421.3	147.4	1.00	57.24	0.087	124.9842	0.024039	3.3068	0.004751	68.68207	8.585259
	03-03-2016 00	0	166	1437.3	0.5300	761.8	1.6746	2406.9	147.5	1.00	57.26	0.087	125.0451	0.02405	3.3068	0.004753	68.71554	8.589442
	03-03-2016 01	0	168	1448.4	0.5190	751.7	1.6689	2417.2	148.6	1.00	57.71	0.087	126.0108	0.024236	3.3068	0.00479	69.24622	8.655777
	03-03-2016 02	0	169	1461.8	0.5170	755.8	1.6545	2418.6	150.0	1.00	58.24	0.087	127.1766	0.02446	3.3068	0.004834	69.88685	8.735857
	03-03-2016 03	0	168	1451.7	0.5250	762.1	1.6634	2414.8	148.9	1.00	57.84	0.087	126.2979	0.024291	3.3068	0.0048	69.40398	8.675498
	03-03-2016 04	0	168	1447.2	0.5240	758.3	1.6613	2404.3	148.5	1.00	57.66	0.087	125.9064	0.024216	3.3068	0.004786	69.18884	8.648606
	03-03-2016 05	0	169	1467.7	0.5080	745.6	1.6407	2408.0	150.6	1.00	58.47	0.087	127.6899	0.024559	3.3068	0.004853	70.16892	8.771116
	03-03-2016 06	0	170	1469.2	0.5150	756.6	1.6428	2413.6	150.7	1.00	58.53	0.087	127.8204	0.024584	3.3068	0.004858	70.24064	8.780008
	03-03-2016 07	0	170	1481.9	0.5140	761.7	1.6260	2409.6	152.0	1.00	59.04	0.087	128.9253	0.024797	3.3068	0.0049	70.84781	8.855976
	03-03-2016 08	0	171	1471.7	0.5230	769.7	1.6336	2404.1	151.0	1.00	58.63	0.087	128.0379	0.024626	3.3068	0.004867	70.36016	8.79502
	03-03-2016 09	0	171	1485.4	0.5210	773.9	1.6179	2403.2	152.4	1.00	59.18	0.087	129.2298	0.024855	3.3068	0.004912	71.01514	8.876892
	03-03-2016 10	0	171	1479.0	0.5240	775.0	1.6088	2379.4	151.7	1.00	58.92	0.087	128.673	0.024748	3.3068	0.004891	70.70916	8.838645
	03-03-2016 11	0	171	1477.4	0.5220	771.2	1.6088	2376.8	151.6	1.00	58.86	0.087	128.5338	0.024721	3.3068	0.004885	70.63267	8.829084
	03-03-2016 12	0	171	1475.7	0.5280	779.2	1.6078	2372.7	151.4	1.00	58.79	0.087	128.3859	0.024693	3.3068	0.00488	70.55139	8.818924
	03-03-2016 13	0	170	1469.7	0.5290	777.5	1.6004	2352.1	150.8	1.00	58.55	0.087	127.8639	0.024593	3.3068	0.00486	70.26454	8.783068
	03-03-2016 14	0	171	1471.5	0.5290	778.4	1.5974	2350.6	151.0	1.00	58.63	0.087	128.0205	0.024623	3.3068	0.004866	70.3506	8.793825
	03-03-2016 15	0	170	1475.1	0.5320	784.8	1.5907	2346.5	151.3	1.00	58.77	0.087	128.3337	0.024683	3.3068	0.004878	70.52271	8.815339
	03-03-2016 16	0	170	1477.3	0.5310	784.4	1.5825	2337.9	151.6	1.00	58.86	0.087	128.5251	0.02472	3.3068	0.004885	70.62789	8.828486
	03-03-2016 17	0	169	1477.9	0.5290	781.8	1.5755	2328.5	151.6	1.00	58.88	0.087	128.5773	0.02473	3.3068	0.004887	70.65657	8.832072
	03-03-2016 18	0	170	1472.2	0.5220	768.5	1.5786	2324.0	151.0	1.00	58.65	0.087	128.0814	0.024634	3.3068	0.004868	70.38406	8.798008
	03-03-2016 19	0	170	1477.8	0.5260	777.3	1.5733	2325.0	151.6	1.00	58.88	0.087	128.5686	0.024728	3.3068	0.004887	70.65179	8.831474
	03-03-2016 20	0	170	1478.4	0.5300	783.6	1.5729	2325.4	151.7	1.00	58.90	0.087	128.6208	0.024738	3.3068	0.004889	70.68048	8.83506
	03-03-2016 21	0	170	1468.5	0.5280	775.4	1.5769	2315.7	150.7	1.00	58.51	0.087	127.7595	0.024573	3.3068	0.004856	70.20717	8.775896
	03-03-2016 22	0	169	1459.7	0.5260	767.8	1.5829	2310.6	149.8	1.00	58.16	0.087	126.9939	0.024425	3.3068	0.004827	69.78645	8.723307
	03-03-2016 23	0	168	1455.6	0.5200	756.9	1.5812	2301.6	149.3	1.00	57.99	0.087	126.6372	0.024357	3.3068	0.004813	69.59044	8.698805
	03-04-2016 00	0	168	1455.8	0.5220	759.9	1.5826	2303.9	149.4	1.00	58.00	0.087	126.6546	0.02436	3.3068	0.004814	69.6	8.7
	03-04-2016 01	0	168	1455.6	0.5270	767.1	1.5778	2296.7	149.3	1.00	57.99	0.087	126.6372	0.024357	3.3068	0.004813	69.59044	8.698805
	03-04-2016 02	0	167	1454.0	0.5280	767.7	1.5781	2294.6	149.2	1.00	57.93	0.087	126.498	0.02433	3.3068	0.004808	69.51394	8.689243
	03-04-2016 03	0	168	1468.6	0.5240	769.5	1.5675	2302.1	150.7	1.00	58.51	0.087	127.7682	0.024574	3.3068	0.004856	70.21195	8.776494
	03-04-2016 04	0	169	1473.6	0.5260	775.1	1.5725	2317.3	151.2	1.00	58.71	0.087	128.2032	0.024658	3.3068	0.004873	70.451	8.806375
	03-04-2016 05	0	169	1455.8	0.5350	778.9	1.5732	2290.2	149.4	1.00	58.00	0.087	126.6546	0.02436	3.3068	0.004814	69.6	8.7
	03-04-2016 06	0	168	1470.7	0.5280	776.5	1.5743	2315.3	150.9	1.00	58.59	0.087	127.9509	0.024609	3.3068	0.004863	70.31235	8.789044
	03-04-2016 07	0	169	1470.9	0.5290	778.1	1.5793	2323.0	150.9	1.00	58.60	0.087	127.9683	0.024613	3.3068	0.004864	70.32191	8.790239
	03-04-2016 08	0	168	1470.6	0.5300	779.4	1.5760	2317.6	150.9	1.00	58.59	0.087	127.9422	0.024608	3.3068	0.004863	70.30757	8.788446
	03-04-2016 09	0	167	1462.4	0.5310	776.5	1.5760	2304.7	150.0	1.00	58.26	0.087	127.2288	0.02447	3.3068	0.004836	69.91554	8.739442
	03-04-2016 10	0	168	1457.0	0.5290	770.8	1.5860	2310.8	149.5	1.00	58.05	0.087	126.759	0.02438	3.3068	0.004818	69.65737	8.707171
	03-04-2016 11	0	165	1447.7	0.5320	770.2	1.5864	2296.6	148.5	1.00	57.68	0.087	125.9499	0.024224	3.3068	0.004787	69.21275	8.651594
	03-04-2016 12	0	167	1450.5	0.5310	770.2	1.6094	2334.5	148.8	1.00	57.79	0.087	126.1935	0.024271	3.3068	0.004796	69.34661	8.668327
	03-04-2016 13	0	169	1467.1	0.4990	732.1	1.6192	2375.5	150.5	1.00	58.45	0.087	127.6377	0.024549	3.3068	0.004851	70.14024	8.76753
	03-04-2016 14	0	170	1477.5	0.5230	772.7	1.6198	2393.3	151.6	1.00	58.86	0.087	128.5425	0.024723	3.3068	0.004886	70.63745	8.829681
	03-04-2016 15	0	170	1468.3	0.5310	779.7	1.6346	2400.1	150.6	1.00	58.50	0.087	127.7421	0.024569	3.3068	0.004855	70.19761	8.774701
	03-04-2016 16	0	170	1470.5	0.5280	776.4	1.6431	2416.2	150.9	1.00	58.59	0.087	127.9335	0.024606	3.3068	0.004863	70.30279	8.787849
	03-04-2016 17	0	171	1476.9	0.5340	788.7	1.6471	2432.6	151.5	1.00	58.84	0.087	128.4903	0.024713	3.3068	0.004884	70.60876	8.826096
	03-04-2016 18	0	171	1476.7	0.5390	795.9	1.6373	2417.8	151.5	1.00	58.83	0.087	128.4729	0.02471	3.3068	0.004883	70.5992	8.8249
	03-04-2016 19	0	171	1475.3	0.5340	787.8	1.6504	2434.9	151.4	1.00	58.78	0.087	128.3511	0.024686	3.3068	0.004878	70.53227	8.816534
	03-04-2016 20	0	171	1479.0	0.5340	789.8	1.6531	2445.0	151.7	1.00	58.92	0.087	128.673	0.024748	3.3068	0.004891	70.70916	8.838645

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-04-2016 21	0	170	1480.8	0.5350	792.2	1.6558	2451.9	151.9	1.00	59.00	0.087	128.8296	0.024778	3.3068	0.004897	70.79522	8.849402
	03-04-2016 22	0	170	1475.5	0.5330	786.4	1.6618	2452.0	151.4	1.00	58.78	0.087	128.3685	0.02469	3.3068	0.004879	70.54183	8.817729
	03-04-2016 23	0	149	1317.4	0.5620	740.4	1.6570	2182.9	135.2	1.00	52.49	0.087	114.6138	0.022044	3.3068	0.004356	62.98327	7.872908
	03-05-2016 00	0	142	1297.3	0.5520	716.1	1.6590	2152.2	133.1	1.00	51.69	0.087	112.8651	0.021708	3.3068	0.00429	62.02231	7.752789
	03-05-2016 01	0	161	1426.6	0.5390	768.9	1.6641	2374.0	146.4	1.00	56.84	0.087	124.1142	0.023871	3.3068	0.004717	68.20398	8.525498
	03-05-2016 02	0	170	1474.1	0.5290	779.8	1.6686	2459.7	151.2	1.00	58.73	0.087	128.2467	0.024666	3.3068	0.004875	70.4749	8.809363
	03-05-2016 03	0	171	1490.0	0.5140	765.9	1.6646	2480.2	152.9	1.00	59.36	0.087	129.63	0.024932	3.3068	0.004927	71.23506	8.904382
	03-05-2016 04	0	171	1494.8	0.5110	763.8	1.6749	2503.6	153.4	1.00	59.55	0.087	130.0476	0.025013	3.3068	0.004943	71.46454	8.933068
	03-05-2016 05	0	171	1492.1	0.5130	765.4	1.6679	2488.7	153.1	1.00	59.45	0.087	129.8127	0.024967	3.3068	0.004934	71.33546	8.916932
	03-05-2016 06	0	171	1484.2	0.5260	780.7	1.6922	2511.6	152.3	1.00	59.13	0.087	129.1254	0.024835	3.3068	0.004908	70.95777	8.869721
	03-05-2016 07	0	171	1479.7	0.5330	788.7	1.7051	2523.1	151.8	1.00	58.95	0.087	128.7339	0.02476	3.3068	0.004893	70.74263	8.842829
	03-05-2016 08	0	172	1494.1	0.5240	782.9	1.6923	2528.4	153.3	1.00	59.53	0.087	129.9867	0.025001	3.3068	0.004941	71.43108	8.928884
	03-05-2016 09	0	172	1499.7	0.5200	779.8	1.7068	2559.7	153.9	1.00	59.75	0.087	130.4739	0.025095	3.3068	0.004959	71.6988	8.962351
	03-05-2016 10	0	172	1502.9	0.5090	765.0	1.7132	2574.8	154.2	1.00	59.88	0.087	130.7523	0.025148	3.3068	0.00497	71.85179	8.981474
	03-05-2016 11	0	171	1511.4	0.5090	769.3	1.7082	2581.7	155.1	1.00	60.22	0.087	131.4918	0.02529	3.3068	0.004998	72.25817	9.032271
	03-05-2016 12	0	171	1502.9	0.5190	780.0	1.7314	2602.1	154.2	1.00	59.88	0.087	130.7523	0.025148	3.3068	0.00497	71.85179	8.981474
	03-05-2016 13	0	170	1495.8	0.5230	782.3	1.7437	2608.3	153.5	1.00	59.59	0.087	130.1346	0.025029	3.3068	0.004946	71.51235	8.939044
	03-05-2016 14	0	169	1497.6	0.5250	786.2	1.7498	2620.5	153.7	1.00	59.67	0.087	130.2912	0.025059	3.3068	0.004952	71.59841	8.949801
	03-05-2016 15	0	169	1509.9	0.5170	780.6	1.7406	2628.2	154.9	1.00	60.16	0.087	131.3613	0.025265	3.3068	0.004993	72.18645	9.023307
	03-05-2016 16	0	168	1490.2	0.5230	779.4	1.7616	2625.1	152.9	1.00	59.37	0.087	129.6474	0.024936	3.3068	0.004928	71.24462	8.905578
	03-05-2016 17	0	168	1493.6	0.5220	779.7	1.7649	2636.1	153.2	1.00	59.51	0.087	129.9432	0.024993	3.3068	0.004939	71.40717	8.925896
	03-05-2016 18	0	168	1491.2	0.5190	773.9	1.7656	2632.9	153.0	1.00	59.41	0.087	129.7344	0.024952	3.3068	0.004931	71.29243	8.911554
	03-05-2016 19	0	168	1483.1	0.5240	777.1	1.7819	2642.8	152.2	1.00	59.09	0.087	129.0297	0.024817	3.3068	0.004904	70.90518	8.863147
	03-05-2016 20	0	168	1480.9	0.5290	783.4	1.7917	2653.4	151.9	1.00	59.00	0.087	128.8383	0.02478	3.3068	0.004897	70.8	8.85
	03-05-2016 21	0	169	1482.0	0.5290	784.0	1.7942	2659.0	152.1	1.00	59.04	0.087	128.934	0.024798	3.3068	0.004901	70.85259	8.856574
	03-05-2016 22	0	169	1481.4	0.5220	773.3	1.8033	2671.4	152.0	1.00	59.02	0.087	128.8818	0.024788	3.3068	0.004899	70.8239	8.852988
	03-05-2016 23	0	169	1481.6	0.5240	776.4	1.8051	2674.4	152.0	1.00	59.03	0.087	128.8992	0.024792	3.3068	0.004899	70.83347	8.854183
	03-06-2016 00	0	168	1476.2	0.5260	776.5	1.8020	2660.1	151.5	1.00	58.81	0.087	128.4294	0.024701	3.3068	0.004881	70.5753	8.821912
	03-06-2016 01	0	147	1328.6	0.5510	732.1	1.8045	2397.4	136.3	1.00	52.93	0.087	115.5882	0.022232	3.3068	0.004393	63.51873	7.939841
	03-06-2016 02	0	141	1289.9	0.5610	723.6	1.8053	2328.6	132.3	1.00	51.39	0.087	112.2213	0.021584	3.3068	0.004265	61.66853	7.708566
	03-06-2016 03	0	143	1318.9	0.5510	726.7	1.7952	2367.7	135.3	1.00	52.55	0.087	114.7443	0.022069	3.3068	0.004361	63.05498	7.881873
	03-06-2016 04	0	135	1224.5	0.5840	715.1	1.7881	2189.5	125.6	1.00	48.78	0.087	106.5315	0.02049	3.3068	0.004049	58.54183	7.317729
	03-06-2016 05	0	134	1244.0	0.5470	680.5	1.7993	2238.3	127.6	1.00	49.56	0.087	108.228	0.020816	3.3068	0.004114	59.4741	7.434263
	03-06-2016 06	0	159	1438.4	0.5190	746.5	1.8001	2589.2	147.6	1.00	57.31	0.087	125.1408	0.024069	3.3068	0.004756	68.76813	8.596016
	03-06-2016 07	0	165	1450.8	0.5340	774.7	1.8140	2631.8	148.8	1.00	57.80	0.087	126.2196	0.024276	3.3068	0.004797	69.36096	8.67012
	03-06-2016 08	0	164	1455.1	0.5160	750.8	1.7999	2619.1	149.3	1.00	57.97	0.087	126.5937	0.024348	3.3068	0.004812	69.56653	8.695817
	03-06-2016 09	0	149	1338.5	0.5240	701.4	1.7910	2397.3	137.3	1.00	53.33	0.087	116.4495	0.022397	3.3068	0.004426	63.99203	7.999004
	03-06-2016 10	0	134	1236.2	0.5430	671.3	1.8076	2234.6	126.8	1.00	49.25	0.087	107.5494	0.020685	3.3068	0.004088	59.1012	7.387649
	03-06-2016 11	0	112	1067.3	0.4870	519.8	1.7557	1873.9	109.5	1.00	42.52	0.087	92.8551	0.017859	3.3068	0.003529	51.02629	6.378287
	03-06-2016 12	0	131	1227.1	0.5140	630.7	1.7774	2181.1	125.9	1.00	48.89	0.087	106.7577	0.020533	3.3068	0.004058	58.66614	7.333267
	03-06-2016 13	0	136	1263.6	0.5460	689.9	1.7815	2251.1	129.6	1.00	50.34	0.087	109.9332	0.021144	3.3068	0.004178	60.41116	7.551394
	03-06-2016 14	0	132	1223.3	0.5760	704.6	1.7755	2172.0	125.5	1.00	48.74	0.087	106.4271	0.02047	3.3068	0.004045	58.48446	7.310558
	03-06-2016 15	0	110	1052.5	0.5950	626.2	1.7909	1884.9	108.0	1.00	41.93	0.087	91.5675	0.017612	3.3068	0.00348	50.31873	6.289841
	03-06-2016 16	0	108	1056.1	0.5860	618.9	1.7794	1879.2	108.4	1.00	42.08	0.087	91.8807	0.017672	3.3068	0.003492	50.49084	6.311355
	03-06-2016 17	0	114	1090.0	0.5750	626.8	1.7894	1950.4	111.8	1.00	43.43	0.087	94.83	0.018239	3.3068	0.003604	52.11155	6.513944
	03-06-2016 18	0	129	1201.4	0.5340	641.5	1.7866	2146.4	123.3	1.00	47.86	0.087	104.5218	0.020103	3.3068	0.003973	57.43745	7.179681
	03-06-2016 19	0	129	1207.3	0.5360	647.1	1.7812	2150.4	123.9	1.00	48.10	0.087	105.0351	0.020202	3.3068	0.003992	57.71952	7.21494

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-06-2016 20	0	144	1305.8	0.5500	718.2	1.7838	2329.3	134.0	1.00	52.02	0.087	113.6046	0.02185	3.3068	0.004318	62.42869	7.803586
	03-06-2016 21	0	155	1384.6	0.5050	699.2	1.7825	2468.1	142.1	1.00	55.16	0.087	120.4602	0.023169	3.3068	0.004579	66.19602	8.274502
	03-06-2016 22	0	155	1394.4	0.4780	666.5	1.7877	2492.8	143.1	1.00	55.55	0.087	121.3128	0.023333	3.3068	0.004611	66.66454	8.333068
	03-06-2016 23	0	156	1393.0	0.4680	651.9	1.7992	2506.3	142.9	1.00	55.50	0.087	121.191	0.023309	3.3068	0.004606	66.59761	8.324701
	03-07-2016 00	0	130	1207.6	0.4910	592.9	1.7811	2150.9	123.9	1.00	48.11	0.087	105.0612	0.020207	3.3068	0.003993	57.73386	7.216733
	03-07-2016 01	0	108	1058.9	0.4990	528.4	1.7004	1800.6	108.6	1.00	42.19	0.087	92.1243	0.017719	3.3068	0.003502	50.6247	6.328088
	03-07-2016 02	0	88	848.9	0.4090	347.2	1.4612	1240.4	87.1	1.00	33.82	0.087	73.8543	0.014205	3.3068	0.002807	40.58486	5.073108
	03-07-2016 03	0	88	860.1	0.4480	385.3	1.4455	1243.3	88.2	1.00	34.27	0.087	74.8287	0.014392	3.3068	0.002844	41.12032	5.14004
	03-07-2016 04	0	110	1048.9	0.4900	514.0	1.5566	1632.7	107.6	1.00	41.79	0.087	91.2543	0.017551	3.3068	0.003468	50.14661	6.268327
	03-07-2016 05	0	136	1266.4	0.5820	737.0	1.7821	2256.9	129.9	1.00	50.45	0.087	110.1768	0.021191	3.3068	0.004188	60.54502	7.568127
	03-07-2016 06	0	161	1423.7	0.5450	775.9	1.7928	2552.4	146.1	1.00	56.72	0.087	123.8619	0.023823	3.3068	0.004708	68.06534	8.508167
	03-07-2016 07	0	161	1427.7	0.5330	761.0	1.7925	2559.2	146.5	1.00	56.88	0.087	124.2099	0.02389	3.3068	0.004721	68.25657	8.532072
	03-07-2016 08	0	152	1355.9	0.5160	699.6	1.7939	2432.3	139.1	1.00	54.02	0.087	117.9633	0.022688	3.3068	0.004484	64.8239	8.102988
	03-07-2016 09	0	133	1256.8	0.9930	1223.0	1.8076	2225.7	125.9	1.00	49.27	0.087	107.6016	0.020695	3.3068	0.00409	59.12988	7.391235
	03-07-2016 10	0	126	1167.0	0.5650	659.4	1.8219	2126.2	119.7	1.00	46.49	0.087	101.529	0.019527	3.3068	0.003859	55.79283	6.974104
	03-07-2016 11	0	98	958.7	0.5260	504.3	1.8055	1730.9	98.4	1.00	38.20	0.087	83.4069	0.016042	3.3068	0.00317	45.83426	5.729283
	03-07-2016 12	0	98	961.9	0.5250	505.0	1.7995	1730.9	98.7	1.00	38.32	0.087	83.6853	0.016096	3.3068	0.003181	45.98725	5.748406
	03-07-2016 13	0	98	951.9	0.5380	512.1	1.8064	1719.5	97.7	1.00	37.92	0.087	82.8153	0.015928	3.3068	0.003148	45.50916	5.688645
	03-07-2016 14	0	98	958.8	0.5390	516.8	1.7940	1720.1	98.4	1.00	38.20	0.087	83.4156	0.016044	3.3068	0.003171	45.83904	5.72988
	03-07-2016 15	0	98	946.5	0.5560	526.3	1.8143	1717.2	97.1	1.00	37.71	0.087	82.3455	0.015838	3.3068	0.00313	45.251	5.656375
	03-07-2016 16	0	107	1021.5	0.5510	562.8	1.8118	1850.8	104.8	1.00	40.70	0.087	88.8705	0.017093	3.3068	0.003378	48.83665	6.104582
	03-07-2016 17	0	129	1175.4	0.5700	670.0	1.8334	2155.0	120.6	1.00	46.83	0.087	102.2598	0.019668	3.3068	0.003887	56.19442	7.024303
	03-07-2016 18	0	144	1293.1	0.5530	715.1	1.8288	2364.8	132.7	1.00	51.52	0.087	112.4997	0.021638	3.3068	0.004276	61.82151	7.727689
	03-07-2016 19	0	162	1398.9	0.5650	790.4	1.8532	2592.5	143.5	1.00	55.73	0.087	121.7043	0.023408	3.3068	0.004626	66.87968	8.35996
	03-07-2016 20	0	150	1320.7	0.5200	686.8	1.8630	2460.5	135.5	1.00	52.62	0.087	114.9009	0.022099	3.3068	0.004367	63.14104	7.892629
	03-07-2016 21	0	126	1142.6	0.5400	617.0	1.8561	2120.8	117.2	1.00	45.52	0.087	99.4062	0.019119	3.3068	0.003778	54.62629	6.828287
	03-07-2016 22	0	99	970.6	0.6309	612.4	1.8293	1775.5	99.6	1.00	38.67	0.087	84.4422	0.016241	3.3068	0.00321	46.40319	5.800398
	03-07-2016 23	0	98	963.8	0.6700	645.7	1.8330	1766.6	98.9	1.00	38.40	0.087	83.8506	0.016127	3.3068	0.003187	46.07809	5.759761
	03-08-2016 00	0	98	955.3	0.6920	661.1	1.8374	1755.3	98.0	1.00	38.06	0.087	83.1111	0.015985	3.3068	0.003159	45.67171	5.708964
	03-08-2016 01	0	98	956.9	0.7010	670.8	1.8310	1752.1	98.2	1.00	38.12	0.087	83.2503	0.016012	3.3068	0.003164	45.74821	5.718526
	03-08-2016 02	0	99	946.0	0.6700	633.8	1.8354	1736.3	97.1	1.00	37.69	0.087	82.302	0.015829	3.3068	0.003128	45.22709	5.653386
	03-08-2016 03	0	98	965.9	0.6610	638.5	1.8347	1772.1	99.1	1.00	38.48	0.087	84.0333	0.016162	3.3068	0.003194	46.17849	5.772311
	03-08-2016 04	0	98	965.2	0.6870	663.1	1.8244	1760.9	99.0	1.00	38.45	0.087	83.9724	0.016151	3.3068	0.003192	46.14502	5.768127
	03-08-2016 05	0	98	954.1	0.6900	658.3	1.8234	1739.7	97.9	1.00	38.01	0.087	83.0067	0.015965	3.3068	0.003155	45.61434	5.701793
	03-08-2016 06	0	109	1041.9	0.6570	684.5	1.8372	1914.2	106.9	1.00	41.51	0.087	90.6453	0.017434	3.3068	0.003445	49.81195	6.226494
	03-08-2016 07	0	142	1280.7	0.6000	768.4	1.8387	2354.8	131.4	1.00	51.02	0.087	111.4209	0.02143	3.3068	0.004235	61.22869	7.653586
	03-08-2016 08	0	139	1225.3	0.5980	732.7	1.8683	2289.2	125.7	1.00	48.82	0.087	106.6011	0.020503	3.3068	0.004052	58.58008	7.32251
	03-08-2016 09	0	107	1027.9	0.6000	616.7	1.8533	1905.0	105.5	1.00	40.95	0.087	89.4273	0.0172	3.3068	0.003399	49.14263	6.142829
	03-08-2016 10	0	116	1084.5	0.4910	532.5	1.8573	2014.2	111.3	1.00	43.21	0.087	94.3515	0.018147	3.3068	0.003586	51.84861	6.481076
	03-08-2016 11	0	121	1119.5	0.5440	609.0	1.8660	2089.0	114.9	1.00	44.60	0.087	97.3965	0.018733	3.3068	0.003702	53.52191	6.690239
	03-08-2016 12	0	132	1179.1	0.5700	672.1	1.8763	2212.4	121.0	1.00	46.98	0.087	102.5817	0.01973	3.3068	0.003899	56.37131	7.046414
	03-08-2016 13	0	125	1145.2	0.5470	626.4	1.8817	2154.9	117.5	1.00	45.63	0.087	99.6324	0.019163	3.3068	0.003787	54.7506	6.843825
	03-08-2016 14	0	143	1268.2	0.5490	696.2	1.8810	2385.5	130.1	1.00	50.53	0.087	110.3334	0.021221	3.3068	0.004194	60.63108	7.578884
	03-08-2016 15	0	155	1346.8	0.5580	751.5	1.8958	2553.3	138.2	1.00	53.66	0.087	117.1716	0.022536	3.3068	0.004454	64.38884	8.048606
	03-08-2016 16	0	155	1356.9	0.5450	739.5	1.8917	2566.9	139.2	1.00	54.06	0.087	118.0503	0.022705	3.3068	0.004487	64.87171	8.108964
	03-08-2016 17	0	146	1305.5	0.5310	693.2	1.8804	2454.9	133.9	1.00	52.01	0.087	113.5785	0.021845	3.3068	0.004317	62.41434	7.801793
	03-08-2016 18	0	142	1282.9	0.5250	673.5	1.8946	2430.6	131.6	1.00	51.11	0.087	111.6123	0.021467	3.3068	0.004242	61.33386	7.666733

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-08-2016 19	0	160	1391.7	0.5450	758.5	1.9075	2654.6	142.8	1.00	55.45	0.087	121.0779	0.023287	3.3068	0.004602	66.53546	8.316932
	03-08-2016 20	0	148	1307.3	0.5320	695.5	1.9057	2491.3	134.1	1.00	52.08	0.087	113.7351	0.021875	3.3068	0.004323	62.5004	7.81255
	03-08-2016 21	0	141	1268.9	0.5340	677.6	1.9064	2419.0	130.2	1.00	50.55	0.087	110.3943	0.021233	3.3068	0.004196	60.66454	7.583068
	03-08-2016 22	0	102	970.8	0.6360	617.4	1.8786	1823.7	99.6	1.00	38.68	0.087	84.4596	0.016244	3.3068	0.00321	46.41275	5.801594
	03-08-2016 23	0	98	956.9	0.6470	619.1	1.8769	1796.0	98.2	1.00	38.12	0.087	83.2503	0.016012	3.3068	0.003164	45.74821	5.718526
	03-09-2016 00	0	98	952.7	0.6690	637.4	1.8820	1793.0	97.7	1.00	37.96	0.087	82.8849	0.015942	3.3068	0.00315	45.54741	5.693426
	03-09-2016 01	0	98	942.6	0.6920	652.3	1.8960	1787.2	96.7	1.00	37.55	0.087	82.0062	0.015773	3.3068	0.003117	45.06454	5.633068
	03-09-2016 02	0	98	946.3	0.6950	657.7	1.8865	1785.2	97.1	1.00	37.70	0.087	82.3281	0.015835	3.3068	0.003129	45.24143	5.655179
	03-09-2016 03	0	98	943.4	0.6990	659.4	1.8888	1781.9	96.8	1.00	37.59	0.087	82.0758	0.015786	3.3068	0.00312	45.10279	5.638849
	03-09-2016 04	0	98	945.2	0.7020	663.5	1.8950	1791.2	97.0	1.00	37.66	0.087	82.2324	0.015816	3.3068	0.003126	45.18884	5.648606
	03-09-2016 05	0	98	932.5	0.6930	646.2	1.8918	1764.1	95.7	1.00	37.15	0.087	81.1275	0.015604	3.3068	0.003084	44.58167	5.572709
	03-09-2016 06	0	131	1180.9	0.6060	715.6	1.9198	2267.1	121.2	1.00	47.05	0.087	102.7383	0.01976	3.3068	0.003905	56.45737	7.057171
	03-09-2016 07	0	137	1219.6	0.5780	704.9	1.9105	2330.0	125.1	1.00	48.59	0.087	106.1052	0.020408	3.3068	0.004033	58.30757	7.288446
	03-09-2016 08	0	109	1027.1	0.6010	617.3	1.9165	1968.4	105.4	1.00	40.92	0.087	89.3577	0.017187	3.3068	0.003396	49.10438	6.138048
	03-09-2016 09	0	109	1033.2	0.5900	609.6	1.9093	1972.7	106.0	1.00	41.16	0.087	89.8884	0.017289	3.3068	0.003417	49.39602	6.174502
	03-09-2016 10	0	106	1006.6	0.5840	587.9	1.9136	1926.2	103.3	1.00	40.10	0.087	87.5742	0.016844	3.3068	0.003329	48.1243	6.015538
	03-09-2016 11	0	101	960.3	0.5200	499.4	1.8880	1813.0	98.5	1.00	38.26	0.087	83.5461	0.016069	3.3068	0.003175	45.91079	5.638845
	03-09-2016 12	0	118	1080.2	0.5600	604.9	1.9158	2059.4	110.8	1.00	43.04	0.087	93.9774	0.018075	3.3068	0.003572	51.64303	6.455378
	03-09-2016 13	0	129	1157.1	0.5510	637.6	1.9177	2219.0	118.7	1.00	46.10	0.087	100.6677	0.019362	3.3068	0.003826	55.31952	6.91494
	03-09-2016 14	0	155	1358.2	0.5410	734.8	1.9095	2593.5	139.3	1.00	54.11	0.087	118.1634	0.022727	3.3068	0.004491	64.93386	8.116733
	03-09-2016 15	0	154	1340.6	0.5430	727.9	1.9250	2580.6	137.5	1.00	53.41	0.087	116.6322	0.022432	3.3068	0.004433	64.09243	8.011554
	03-09-2016 16	0	160	1378.2	0.5350	737.3	1.9201	2646.3	141.4	1.00	54.91	0.087	119.9034	0.023062	3.3068	0.004557	65.89004	8.236255
	03-09-2016 17	0	140	1234.2	0.5090	628.2	1.9144	2362.7	126.6	1.00	49.17	0.087	107.3754	0.020652	3.3068	0.004081	59.00558	7.375697
	03-09-2016 18	0	140	1253.9	0.5230	655.8	1.9064	2390.4	128.7	1.00	49.96	0.087	109.0893	0.020982	3.3068	0.004146	59.94741	7.493426
	03-09-2016 19	0	170	1469.0	0.5360	787.4	1.8989	2789.5	150.7	1.00	58.53	0.087	127.803	0.024581	3.3068	0.004858	70.23108	8.778884
	03-09-2016 20	0	164	1422.1	0.5480	779.3	1.8923	2691.0	145.9	1.00	56.66	0.087	123.7227	0.023796	3.3068	0.004703	67.98884	8.498606
	03-09-2016 21	0	162	1414.0	0.5290	748.0	1.8891	2671.2	145.1	1.00	56.33	0.087	123.018	0.023661	3.3068	0.004676	67.60159	8.450199
	03-09-2016 22	0	127	1150.4	0.5300	609.7	1.8885	2172.5	118.0	1.00	45.83	0.087	100.0848	0.01925	3.3068	0.003804	54.9992	6.8749
	03-09-2016 23	0	139	1254.8	0.5420	680.1	1.8771	2355.4	128.7	1.00	49.99	0.087	109.1676	0.020997	3.3068	0.004149	59.99044	7.498805
	03-10-2016 00	0	98	940.9	0.6220	585.2	1.8673	1756.9	96.5	1.00	37.49	0.087	81.8583	0.015744	3.3068	0.003111	44.98327	5.622908
	03-10-2016 01	0	98	965.7	0.6080	587.1	1.8690	1804.9	99.1	1.00	38.47	0.087	84.0159	0.016159	3.3068	0.003193	46.16892	5.771116
	03-10-2016 02	0	98	977.8	0.6210	607.2	1.8449	1803.9	100.3	1.00	38.96	0.087	85.0686	0.016362	3.3068	0.003233	46.74741	5.843426
	03-10-2016 03	0	98	942.7	0.6630	625.0	1.8529	1746.7	96.7	1.00	37.56	0.087	82.0149	0.015774	3.3068	0.003117	45.06932	5.633665
	03-10-2016 04	0	99	946.2	0.6740	637.7	1.8358	1737.0	97.1	1.00	37.70	0.087	82.3194	0.015833	3.3068	0.003129	45.23665	5.654582
	03-10-2016 05	0	130	1163.7	0.6050	704.0	1.8506	2153.6	119.4	1.00	46.36	0.087	101.2419	0.019472	3.3068	0.003848	55.63506	6.954382
	03-10-2016 06	0	172	1474.7	0.5780	852.4	1.8619	2745.7	151.3	1.00	58.75	0.087	128.2989	0.024676	3.3068	0.004876	70.50359	8.812948
	03-10-2016 07	0	174	1493.5	0.5850	873.7	1.8516	2765.3	153.2	1.00	59.50	0.087	129.9345	0.024991	3.3068	0.004939	71.40239	8.925299
	03-10-2016 08	0	170	1455.0	0.5730	833.7	1.8494	2690.9	149.3	1.00	57.97	0.087	126.585	0.024347	3.3068	0.004811	69.56175	8.695219
	03-10-2016 09	0	158	1362.5	0.5270	718.0	1.8501	2520.8	139.8	1.00	54.28	0.087	118.5375	0.022799	3.3068	0.004505	65.13944	8.14243
	03-10-2016 10	0	165	1403.0	0.5270	739.4	1.8621	2612.5	143.9	1.00	55.90	0.087	122.061	0.023476	3.3068	0.004639	67.0757	8.384462
	03-10-2016 11	0	164	1401.4	0.5310	744.1	1.8596	2606.1	143.8	1.00	55.83	0.087	121.9218	0.02345	3.3068	0.004634	66.9992	8.3749
	03-10-2016 12	0	164	1396.6	0.5340	745.8	1.8600	2597.7	143.3	1.00	55.64	0.087	121.5042	0.023369	3.3068	0.004618	66.76972	8.346215
	03-10-2016 13	0	164	1402.4	0.5330	747.5	1.8542	2600.4	143.9	1.00	55.87	0.087	122.0088	0.023466	3.3068	0.004637	67.04701	8.380876
	03-10-2016 14	0	164	1399.7	0.5320	744.6	1.8533	2594.0	143.6	1.00	55.76	0.087	121.7739	0.023421	3.3068	0.004628	66.91793	8.364741
	03-10-2016 15	0	164	1407.7	0.5340	751.7	1.8495	2603.5	144.4	1.00	56.08	0.087	122.4699	0.023555	3.3068	0.004655	67.3004	8.41255
	03-10-2016 16	0	164	1414.3	0.5340	755.2	1.8377	2599.0	145.1	1.00	56.35	0.087	123.0441	0.023666	3.3068	0.004677	67.61594	8.451992
	03-10-2016 17	0	164	1411.1	0.5290	746.5	1.8342	2588.2	144.8	1.00	56.22	0.087	122.7657	0.023612	3.3068	0.004666	67.46295	8.432869

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/Hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/Hr)	Mercury (lb/TTBtu)	Mercury (lb/Hr)	HCl (lb/Hr)	HF (lb/Hr)
	03-10-2016 18	0	164	1414.6	0.5310	751.2	1.8214	2576.5	145.1	1.00	56.36	0.087	123.0702	0.023671	3.3068	0.004678	67.63028	8.453785
	03-10-2016 19	0	164	1414.7	0.5360	758.3	1.8234	2579.5	145.1	1.00	56.36	0.087	123.0789	0.023672	3.3068	0.004678	67.63506	8.454382
	03-10-2016 20	0	164	1415.3	0.5340	755.8	1.8196	2575.3	145.2	1.00	56.39	0.087	123.1311	0.023682	3.3068	0.00468	67.66375	8.457968
	03-10-2016 21	0	160	1379.0	0.5420	747.4	1.8251	2516.8	141.5	1.00	54.94	0.087	119.973	0.023075	3.3068	0.00456	65.92829	8.241036
	03-10-2016 22	0	109	1008.0	0.5750	579.6	1.8010	1815.4	103.4	1.00	40.16	0.087	87.696	0.016867	3.3068	0.003333	48.19124	6.023904
	03-10-2016 23	0	105	993.2	0.5930	589.0	1.7931	1780.9	101.9	1.00	39.57	0.087	86.4084	0.016619	3.3068	0.003284	47.48367	5.935458
	03-11-2016 00	0	98	942.5	0.6320	595.7	1.7917	1688.7	96.7	1.00	37.55	0.087	81.9975	0.015771	3.3068	0.003117	45.05976	5.63247
	03-11-2016 01	0	98	939.4	0.6420	603.1	1.7801	1672.2	96.4	1.00	37.43	0.087	81.7278	0.015719	3.3068	0.003106	44.91155	5.613944
	03-11-2016 02	0	98	941.0	0.6510	612.6	1.7722	1667.6	96.5	1.00	37.49	0.087	81.867	0.015746	3.3068	0.003112	44.98805	5.623506
	03-11-2016 03	0	98	934.3	0.6610	617.6	1.7835	1666.3	95.9	1.00	37.22	0.087	81.2841	0.015634	3.3068	0.00309	44.66773	5.583466
	03-11-2016 04	0	98	942.7	0.6580	620.3	1.7683	1667.0	96.7	1.00	37.56	0.087	82.0149	0.015774	3.3068	0.003117	45.06932	5.633665
	03-11-2016 05	0	129	1167.2	0.5950	694.5	1.7932	2093.0	119.8	1.00	46.50	0.087	101.5464	0.019531	3.3068	0.00386	55.80239	6.975299
	03-11-2016 06	0	161	1404.8	0.5810	816.2	1.7827	2504.3	144.1	1.00	55.97	0.087	122.2176	0.023507	3.3068	0.004645	67.16175	8.395219
	03-11-2016 07	0	168	1459.9	0.5750	839.4	1.7883	2610.7	149.8	1.00	58.16	0.087	127.0113	0.024429	3.3068	0.004828	69.79602	8.724502
	03-11-2016 08	0	168	1454.6	0.5430	789.8	1.7962	2612.7	149.2	1.00	57.95	0.087	126.5502	0.02434	3.3068	0.00481	69.54263	8.692829
	03-11-2016 09	0	168	1457.6	0.5290	771.1	1.8088	2636.5	149.6	1.00	58.07	0.087	126.8112	0.02439	3.3068	0.00482	69.68606	8.710757
	03-11-2016 10	0	168	1456.6	0.5280	769.1	1.8153	2644.1	149.5	1.00	58.03	0.087	126.7242	0.024373	3.3068	0.004817	69.63825	8.704781
	03-11-2016 11	0	168	1463.4	0.5250	768.3	1.8139	2654.4	150.1	1.00	58.30	0.087	127.3158	0.024487	3.3068	0.004839	69.96335	8.745418
	03-11-2016 12	0	168	1469.5	0.5110	750.9	1.8093	2658.7	150.8	1.00	58.55	0.087	127.8465	0.024589	3.3068	0.004859	70.25498	8.781873
	03-11-2016 13	0	169	1462.5	0.5160	754.7	1.8146	2653.9	150.1	1.00	58.27	0.087	127.2375	0.024472	3.3068	0.004836	69.92032	8.74004
	03-11-2016 14	0	168	1458.8	0.5180	755.7	1.8129	2644.7	149.7	1.00	58.12	0.087	126.9156	0.02441	3.3068	0.004824	69.74343	8.717928
	03-11-2016 15	0	168	1457.2	0.5190	756.3	1.8122	2640.8	149.5	1.00	58.06	0.087	126.7764	0.024383	3.3068	0.004819	69.66693	8.708367
	03-11-2016 16	0	168	1464.7	0.5170	757.2	1.8036	2641.7	150.3	1.00	58.35	0.087	127.4289	0.024509	3.3068	0.004843	70.0255	8.753187
	03-11-2016 17	0	168	1459.8	0.5170	754.7	1.8042	2633.8	149.8	1.00	58.16	0.087	127.0026	0.024427	3.3068	0.004827	69.79124	8.723904
	03-11-2016 18	0	168	1460.5	0.5100	744.9	1.7996	2628.3	149.9	1.00	58.19	0.087	127.0635	0.024439	3.3068	0.00483	69.8247	8.728088
	03-11-2016 19	0	168	1457.4	0.5150	750.6	1.8056	2631.5	149.5	1.00	58.06	0.087	126.7938	0.024387	3.3068	0.004819	69.67649	8.709562
	03-11-2016 20	0	168	1424.1	0.5160	734.8	1.8267	2601.4	146.1	1.00	56.74	0.087	123.8967	0.02383	3.3068	0.004709	68.08446	8.510558
	03-11-2016 21	0	157	1330.0	0.5190	690.3	1.8249	2427.1	136.5	1.00	52.99	0.087	115.71	0.022255	3.3068	0.004398	63.58566	7.948207
	03-11-2016 22	0	155	1316.6	0.5120	674.1	1.8305	2410.1	135.1	1.00	52.45	0.087	114.5442	0.022031	3.3068	0.004354	62.94502	7.868127
	03-11-2016 23	0	138	1191.2	0.5000	595.6	1.8355	2186.4	122.2	1.00	47.46	0.087	103.6344	0.019932	3.3068	0.003939	56.9498	7.118725
	03-12-2016 00	0	102	941.9	0.5590	526.5	1.8130	1707.7	96.6	1.00	37.53	0.087	81.9453	0.015761	3.3068	0.003115	45.03108	5.628884
	03-12-2016 01	0	98	917.0	0.5680	520.9	1.8061	1656.2	94.1	1.00	36.53	0.087	79.779	0.015344	3.3068	0.003032	43.84064	5.48008
	03-12-2016 02	0	98	905.5	0.5990	542.4	1.8155	1643.9	92.9	1.00	36.08	0.087	78.7785	0.015152	3.3068	0.002994	43.29084	5.411355
	03-12-2016 03	0	98	895.1	0.6270	561.2	1.8065	1617.0	91.8	1.00	35.66	0.087	77.8737	0.014978	3.3068	0.00296	42.79363	5.349203
	03-12-2016 04	0	98	898.0	0.6320	567.5	1.7916	1608.9	92.1	1.00	35.78	0.087	78.126	0.015026	3.3068	0.002969	42.93227	5.366534
	03-12-2016 05	0	103	934.9	0.6050	565.6	1.7850	1668.8	95.9	1.00	37.25	0.087	81.3363	0.015644	3.3068	0.003092	44.69641	5.587052
	03-12-2016 06	0	117	1032.0	0.5570	574.8	1.8098	1867.7	105.9	1.00	41.12	0.087	89.784	0.017269	3.3068	0.003413	49.33865	6.167331
	03-12-2016 07	0	103	916.1	0.6179	566.1	1.8115	1659.5	94.0	1.00	36.50	0.087	79.7007	0.015329	3.3068	0.003029	43.79761	5.474701
	03-12-2016 08	0	149	1281.8	0.5730	734.5	1.8341	2350.9	131.5	1.00	51.07	0.087	111.5166	0.021448	3.3068	0.004239	61.28127	7.660159
	03-12-2016 09	0	169	1420.3	0.5770	819.5	1.8522	2630.7	145.7	1.00	56.59	0.087	123.5661	0.023766	3.3068	0.004697	67.90279	8.487849
	03-12-2016 10	0	168	1420.0	0.5500	781.0	1.8563	2635.9	145.7	1.00	56.57	0.087	123.54	0.023761	3.3068	0.004696	67.88845	8.486056
	03-12-2016 11	0	168	1420.1	0.5340	758.3	1.8591	2640.1	145.7	1.00	56.58	0.087	123.5487	0.023763	3.3068	0.004696	67.89323	8.486653
	03-12-2016 12	0	168	1413.6	0.5260	743.6	1.8737	2648.7	145.0	1.00	56.32	0.087	122.9832	0.023654	3.3068	0.004674	67.58247	8.447809
	03-12-2016 13	0	168	1411.9	0.5270	744.1	1.8816	2656.6	144.9	1.00	56.25	0.087	122.8353	0.023625	3.3068	0.004669	67.5012	8.437649
	03-12-2016 14	0	168	1415.0	0.5290	748.5	1.8808	2661.4	145.2	1.00	56.37	0.087	123.105	0.023677	3.3068	0.004679	67.6494	8.456175
	03-12-2016 15	0	168	1416.0	0.5310	751.9	1.8825	2665.6	145.3	1.00	56.41	0.087	123.192	0.023694	3.3068	0.004682	67.69721	8.462151
	03-12-2016 16	0	168	1431.9	0.5180	741.7	1.8758	2685.9	146.9	1.00	57.05	0.087	124.5753	0.02396	3.3068	0.004735	68.45737	8.557174

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-12-2016 17	0	168	1418.4	0.5330	756.0	1.8996	2694.4	145.5	1.00	56.51	0.087	123.4008	0.023734	3.3068	0.00469	67.81195	8.476494
	03-12-2016 18	0	168	1416.4	0.5300	750.7	1.9000	2691.2	145.3	1.00	56.43	0.087	123.2268	0.023701	3.3068	0.004684	67.71633	8.464542
	03-12-2016 19	0	168	1413.9	0.5290	748.0	1.9201	2714.8	145.1	1.00	56.33	0.087	123.0093	0.023659	3.3068	0.004675	67.59681	8.449602
	03-12-2016 20	0	168	1428.0	0.5240	748.3	1.9200	2741.7	146.5	1.00	56.89	0.087	124.236	0.023895	3.3068	0.004722	68.27092	8.533865
	03-12-2016 21	0	168	1416.5	0.5320	753.6	1.9391	2746.7	145.3	1.00	56.43	0.087	123.2355	0.023702	3.3068	0.004684	67.72112	8.465139
	03-12-2016 22	0	168	1415.4	0.5270	745.9	1.9477	2756.8	145.2	1.00	56.39	0.087	123.1398	0.023684	3.3068	0.00468	67.66853	8.458566
	03-12-2016 23	0	158	1349.7	0.5280	712.6	1.9300	2604.9	138.5	1.00	53.77	0.087	117.4239	0.022585	3.3068	0.004463	64.52749	8.065936
	03-13-2016 00	0	144	1228.2	0.5160	633.8	1.9425	2385.8	126.0	1.00	48.93	0.087	106.8534	0.020552	3.3068	0.004061	58.71873	7.339841
	03-13-2016 01	0	115	1027.7	0.5450	560.1	1.9238	1977.1	105.4	1.00	40.94	0.087	89.4099	0.017197	3.3068	0.003398	49.13307	6.141633
	03-13-2016 02	0	98	900.7	0.6140	553.0	1.8966	1708.3	92.4	1.00	35.88	0.087	78.3609	0.015071	3.3068	0.002978	43.06135	5.382669
	03-13-2016 03	0	98	894.7	0.6340	567.2	1.9134	1711.9	91.8	1.00	35.65	0.087	77.8389	0.014971	3.3068	0.002959	42.7745	5.346813
	03-13-2016 04	0	98	891.3	0.6520	581.1	1.9087	1701.2	91.4	1.00	35.51	0.087	77.5431	0.014914	3.3068	0.002947	42.61195	5.326494
	03-13-2016 05	0	99	898.2	0.6389	573.9	1.8807	1689.2	92.2	1.00	35.78	0.087	78.1434	0.01503	3.3068	0.00297	42.94183	5.367729
	03-13-2016 06	0	98	894.9	0.6179	553.0	1.8971	1697.7	91.8	1.00	35.65	0.087	77.8563	0.014974	3.3068	0.002959	42.78406	5.348008
	03-13-2016 07	0	99	890.9	0.6080	541.7	1.9148	1705.9	91.4	1.00	35.49	0.087	77.5083	0.014907	3.3068	0.002946	42.59283	5.324104
	03-13-2016 08	0	98	887.6	0.6140	545.0	1.8893	1676.9	91.1	1.00	35.36	0.087	77.2212	0.014852	3.3068	0.002935	42.43506	5.304382
	03-13-2016 09	0	98	886.3	0.6110	541.5	1.8952	1679.7	90.9	1.00	35.31	0.087	77.1081	0.014831	3.3068	0.002931	42.37291	5.296614
	03-13-2016 10	0	98	882.1	0.6110	539.0	1.9089	1683.8	90.5	1.00	35.14	0.087	76.7427	0.01476	3.3068	0.002917	42.17211	5.271514
	03-13-2016 11	0	115	1012.9	0.5800	587.5	1.9249	1949.7	103.9	1.00	40.35	0.087	88.1223	0.016949	3.3068	0.003349	48.4255	6.053187
	03-13-2016 12	0	135	1174.5	0.5800	681.2	1.9168	2251.3	120.5	1.00	46.79	0.087	102.1815	0.019653	3.3068	0.003884	56.15139	7.018924
	03-13-2016 13	0	154	1317.9	0.5110	673.4	1.9515	2571.9	135.2	1.00	52.51	0.087	114.6573	0.022053	3.3068	0.004358	63.00717	7.875896
	03-13-2016 14	0	160	1356.6	0.5100	691.9	1.9582	2656.5	139.2	1.00	54.05	0.087	118.0242	0.0227	3.3068	0.004486	64.85737	8.107171
	03-13-2016 15	0	160	1368.8	0.5060	692.6	1.9264	2636.9	140.4	1.00	54.53	0.087	119.0856	0.022904	3.3068	0.004526	65.44064	8.180008
	03-13-2016 16	0	160	1370.4	0.5010	686.6	1.9224	2634.5	140.6	1.00	54.60	0.087	119.2248	0.022931	3.3068	0.004532	65.51713	8.189641
	03-13-2016 17	0	160	1373.3	0.5130	704.5	1.9188	2635.1	140.9	1.00	54.71	0.087	119.4771	0.02298	3.3068	0.004541	65.65578	8.206972
	03-13-2016 18	0	162	1441.3	0.5170	745.2	1.9063	2747.5	147.9	1.00	57.42	0.087	125.3931	0.024117	3.3068	0.004766	68.90677	8.613347
	03-13-2016 19	0	171	1483.4	0.5190	769.9	1.9307	2864.0	152.2	1.00	59.10	0.087	129.0558	0.024822	3.3068	0.004905	70.91952	8.86494
	03-13-2016 20	0	171	1495.5	0.5190	776.2	1.9201	2871.5	153.4	1.00	59.58	0.087	130.1085	0.025024	3.3068	0.004945	71.49801	8.937251
	03-13-2016 21	0	163	1438.5	0.5340	768.2	1.9192	2760.7	147.6	1.00	57.31	0.087	125.1495	0.024071	3.3068	0.004757	68.77291	8.596614
	03-13-2016 22	0	139	1285.1	0.5060	650.3	1.9004	2442.2	131.9	1.00	51.20	0.087	111.8037	0.021504	3.3068	0.00425	61.43904	7.67988
	03-13-2016 23	0	151	1358.8	0.5290	718.8	1.9054	2589.1	139.4	1.00	54.14	0.087	118.2156	0.022737	3.3068	0.004493	64.96255	8.120319
	03-14-2016 00	0	152	1344.7	0.5330	716.7	1.9071	2564.5	138.0	1.00	53.57	0.087	116.9889	0.022501	3.3068	0.004447	64.28845	8.036056
	03-14-2016 01	0	117	1098.2	0.5570	611.7	1.8891	2074.6	112.7	1.00	43.75	0.087	95.5434	0.018376	3.3068	0.003631	52.50359	6.562948
	03-14-2016 02	0	103	1001.2	0.5390	539.6	1.8699	1872.1	102.7	1.00	39.89	0.087	87.1044	0.016753	3.3068	0.003311	47.86614	5.983267
	03-14-2016 03	0	98	960.6	0.5100	489.9	1.8593	1786.0	98.6	1.00	38.27	0.087	83.5722	0.016074	3.3068	0.003176	45.9251	5.740637
	03-14-2016 04	0	103	976.0	0.5280	515.3	1.8645	1819.8	100.1	1.00	38.88	0.087	84.912	0.016331	3.3068	0.003227	46.66135	5.832669
	03-14-2016 05	0	115	1071.4	0.5230	560.3	1.8482	1980.2	109.9	1.00	42.69	0.087	93.2118	0.017928	3.3068	0.003543	51.22231	6.402789
	03-14-2016 06	0	160	1407.0	0.5640	793.5	1.8679	2628.1	144.4	1.00	56.06	0.087	122.409	0.023543	3.3068	0.004653	67.26693	8.408367
	03-14-2016 07	0	171	1476.7	0.5370	793.0	1.8887	2789.1	151.5	1.00	58.83	0.087	128.4729	0.02471	3.3068	0.004883	70.5992	8.8249
	03-14-2016 08	0	174	1491.9	0.5140	766.8	1.8987	2832.6	153.1	1.00	59.44	0.087	129.7953	0.024964	3.3068	0.004933	71.3259	8.915737
	03-14-2016 09	0	174	1497.7	0.5020	751.8	1.8864	2825.2	153.7	1.00	59.67	0.087	130.2999	0.025061	3.3068	0.004953	71.60319	8.950398
	03-14-2016 10	0	173	1499.9	0.5120	767.9	1.8792	2818.6	153.9	1.00	59.76	0.087	130.4913	0.025098	3.3068	0.00496	71.70837	8.963546
	03-14-2016 11	0	174	1497.2	0.5110	765.1	1.8867	2824.7	153.6	1.00	59.65	0.087	130.2564	0.025053	3.3068	0.004951	71.57928	8.94741
	03-14-2016 12	0	172	1486.6	0.5200	773.0	1.8759	2788.7	152.5	1.00	59.23	0.087	129.3342	0.024875	3.3068	0.004916	71.07251	8.884064
	03-14-2016 13	0	174	1499.1	0.5080	761.5	1.8737	2808.9	153.8	1.00	59.73	0.087	130.4217	0.025085	3.3068	0.004957	71.67012	8.958765
	03-14-2016 14	0	171	1478.5	0.5120	757.0	1.8723	2768.2	151.7	1.00	58.90	0.087	128.6295	0.02474	3.3068	0.004889	70.68526	8.835657
	03-14-2016 15	0	174	1497.1	0.5220	781.5	1.8772	2810.3	153.6	1.00	59.65	0.087	130.2477	0.025051	3.3068	0.004951	71.5745	8.946813

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-14-2016 16	0	171	1470.7	0.5260	773.6	1.8801	2765.0	150.9	1.00	58.59	0.087	127.9509	0.024609	3.3068	0.004863	70.31235	8.789044
	03-14-2016 17	0	172	1485.7	0.5220	775.5	1.8679	2775.2	152.4	1.00	59.19	0.087	129.2559	0.02486	3.3068	0.004913	71.02948	8.878685
	03-14-2016 18	0	173	1488.9	0.5180	771.3	1.8610	2770.9	152.8	1.00	59.32	0.087	129.5343	0.024914	3.3068	0.004923	71.18247	8.897809
	03-14-2016 19	0	172	1495.6	0.5170	773.2	1.8499	2766.7	153.4	1.00	59.59	0.087	130.1172	0.025026	3.3068	0.004946	71.50279	8.937849
	03-14-2016 20	0	172	1484.0	0.5260	780.6	1.8619	2763.0	152.3	1.00	59.12	0.087	129.108	0.024832	3.3068	0.004907	70.94821	8.868526
	03-14-2016 21	0	172	1495.7	0.5480	819.6	1.8446	2758.9	153.5	1.00	59.59	0.087	130.1259	0.025028	3.3068	0.004946	71.50757	8.938446
	03-14-2016 22	0	163	1427.8	0.5640	805.3	1.8371	2623.0	146.5	1.00	56.88	0.087	124.2186	0.023891	3.3068	0.004721	68.26135	8.532669
	03-14-2016 23	0	123	1130.9	0.5460	617.5	1.8353	2075.5	116.0	1.00	45.06	0.087	98.3883	0.018923	3.3068	0.00374	54.06693	6.758367
	03-15-2016 00	0	132	1218.6	0.5290	644.6	1.8148	2211.5	125.0	1.00	48.55	0.087	106.0182	0.020391	3.3068	0.00403	58.25976	7.28247
	03-15-2016 01	0	104	1029.6	0.5950	612.6	1.8208	1874.7	105.6	1.00	41.02	0.087	89.5752	0.017228	3.3068	0.003405	49.2239	6.152988
	03-15-2016 02	0	101	1002.7	0.5840	585.6	1.8051	1810.0	102.9	1.00	39.95	0.087	87.2349	0.016778	3.3068	0.003316	47.93785	5.992231
	03-15-2016 03	0	103	1026.2	0.5760	591.1	1.8001	1847.3	105.3	1.00	40.88	0.087	89.2794	0.017171	3.3068	0.003393	49.06135	6.132669
	03-15-2016 04	0	111	1066.5	0.5840	622.8	1.8212	1942.3	109.4	1.00	42.49	0.087	92.7855	0.017846	3.3068	0.003527	50.98805	6.373506
	03-15-2016 05	0	148	1347.6	0.5480	738.5	1.7993	2424.8	138.3	1.00	53.69	0.087	117.2412	0.022549	3.3068	0.004456	64.42709	8.053386
	03-15-2016 06	0	152	1355.0	0.5420	734.4	1.8098	2452.3	139.0	1.00	53.98	0.087	117.885	0.022673	3.3068	0.004481	64.78088	8.09761
	03-15-2016 07	0	155	1362.6	0.5210	709.9	1.8186	2478.0	139.8	1.00	54.29	0.087	118.5462	0.0228	3.3068	0.004506	65.14422	8.143028
	03-15-2016 08	0	157	1380.6	0.5110	705.5	1.8220	2515.5	141.7	1.00	55.00	0.087	120.1122	0.023102	3.3068	0.004565	66.00478	8.250598
	03-15-2016 09	0	152	1339.3	0.5080	680.4	1.8330	2454.9	137.4	1.00	53.36	0.087	116.5191	0.022411	3.3068	0.004429	64.03028	8.003785
	03-15-2016 10	0	154	1353.4	0.5040	682.1	1.8360	2484.9	138.9	1.00	53.92	0.087	117.7458	0.022647	3.3068	0.004475	64.70438	8.088048
	03-15-2016 11	0	158	1391.6	0.5060	704.1	1.8260	2541.1	142.8	1.00	55.44	0.087	121.0692	0.023286	3.3068	0.004602	66.53068	8.316335
	03-15-2016 12	0	155	1367.7	0.5080	694.8	1.8285	2500.8	140.3	1.00	54.49	0.087	118.9899	0.022886	3.3068	0.004523	65.38805	8.173506
	03-15-2016 13	0	149	1327.0	0.5060	671.5	1.8468	2450.7	136.2	1.00	52.87	0.087	115.449	0.022205	3.3068	0.004388	63.44223	7.990279
	03-15-2016 14	0	142	1275.3	0.5210	664.4	1.8433	2350.7	130.8	1.00	50.81	0.087	110.9511	0.02134	3.3068	0.004217	60.97052	7.621315
	03-15-2016 15	0	145	1285.1	0.5350	687.5	1.8508	2378.5	131.8	1.00	51.20	0.087	111.8037	0.021504	3.3068	0.00425	61.43904	7.67988
	03-15-2016 16	0	147	1290.0	0.5300	683.7	1.8602	2399.6	132.3	1.00	51.39	0.087	112.23	0.021586	3.3068	0.004266	61.67331	7.709163
	03-15-2016 17	0	144	1278.5	0.5250	671.2	1.8584	2376.0	131.2	1.00	50.94	0.087	111.2295	0.021393	3.3068	0.004228	61.12351	7.640438
	03-15-2016 18	0	151	1340.2	0.5180	694.2	1.8523	2482.4	137.5	1.00	53.39	0.087	116.5974	0.022426	3.3068	0.004432	64.07331	8.009163
	03-15-2016 19	0	156	1366.0	0.5250	717.2	1.8695	2553.7	140.2	1.00	54.42	0.087	118.842	0.022857	3.3068	0.004517	65.30677	8.163347
	03-15-2016 20	0	153	1346.6	0.5140	692.2	1.8666	2513.6	138.2	1.00	53.65	0.087	117.1542	0.022533	3.3068	0.004453	64.37928	8.04741
	03-15-2016 21	0	145	1295.5	0.5020	650.3	1.8563	2404.8	132.9	1.00	51.61	0.087	112.7085	0.021678	3.3068	0.004284	61.93625	7.742032
	03-15-2016 22	0	137	1237.8	0.5270	652.3	1.8586	2300.6	127.0	1.00	49.31	0.087	107.6886	0.020712	3.3068	0.004093	59.17769	7.397211
	03-15-2016 23	0	104	1000.9	0.6260	626.6	1.8273	1828.9	102.7	1.00	39.88	0.087	87.0783	0.016748	3.3068	0.00331	47.85179	5.981474
	03-16-2016 00	0	99	1003.8	0.6060	608.3	1.8142	1821.1	103.0	1.00	39.99	0.087	87.3306	0.016797	3.3068	0.003319	47.99044	5.998805
	03-16-2016 01	0	99	997.5	0.6340	632.4	1.8359	1831.3	102.3	1.00	39.74	0.087	86.7825	0.016691	3.3068	0.003299	47.68924	5.961155
	03-16-2016 02	0	99	970.7	0.6650	645.5	1.8255	1772.0	99.6	1.00	38.67	0.087	84.4509	0.016243	3.3068	0.00321	46.40797	5.800996
	03-16-2016 03	0	99	983.8	0.6480	637.5	1.8030	1773.8	100.9	1.00	39.20	0.087	85.5906	0.016462	3.3068	0.003253	47.03426	5.879283
	03-16-2016 04	0	104	1014.4	0.6150	623.9	1.8150	1841.1	104.1	1.00	40.41	0.087	88.2528	0.016974	3.3068	0.003354	48.49721	6.062151
	03-16-2016 05	0	133	1232.5	0.5600	690.2	1.8428	2271.2	126.5	1.00	49.10	0.087	107.2275	0.020624	3.3068	0.004076	58.9243	7.365538
	03-16-2016 06	0	148	1322.2	0.5410	715.3	1.8385	2430.8	135.7	1.00	52.68	0.087	115.0314	0.022124	3.3068	0.004372	63.21275	7.901594
	03-16-2016 07	0	163	1417.1	0.5280	748.2	1.8588	2634.1	145.4	1.00	56.46	0.087	123.2877	0.023712	3.3068	0.004686	67.7498	8.468725
	03-16-2016 08	0	166	1432.3	0.5260	753.4	1.8573	2660.2	147.0	1.00	57.06	0.087	124.6101	0.023967	3.3068	0.004736	68.47649	8.559562
	03-16-2016 09	0	168	1437.9	0.5240	753.5	1.8694	2688.0	147.5	1.00	57.29	0.087	125.0973	0.02406	3.3068	0.004755	68.74422	8.593028
	03-16-2016 10	0	169	1441.4	0.5170	745.2	1.8624	2684.5	147.9	1.00	57.43	0.087	125.4018	0.024119	3.3068	0.004766	68.91155	8.613944
	03-16-2016 11	0	168	1441.4	0.5170	745.2	1.8578	2677.8	147.9	1.00	57.43	0.087	125.4018	0.024119	3.3068	0.004766	68.91155	8.613944
	03-16-2016 12	0	168	1442.2	0.5190	748.5	1.8532	2672.7	148.0	1.00	57.46	0.087	125.4714	0.024132	3.3068	0.004769	68.9498	8.618725
	03-16-2016 13	0	168	1445.5	0.5170	747.3	1.8404	2660.3	148.3	1.00	57.59	0.087	125.7585	0.024188	3.3068	0.00478	69.10757	8.638446
	03-16-2016 14	0	172	1471.4	0.5100	750.4	1.8393	2706.3	151.0	1.00	58.62	0.087	128.0118	0.024621	3.3068	0.004866	70.34582	8.793227

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-16-2016 15	0	172	1472.7	0.4950	729.0	1.8546	2731.2	151.1	1.00	58.67	0.087	128.1249	0.024643	3.3068	0.00487	70.40797	8.800996
	03-16-2016 16	0	168	1451.0	0.5040	731.3	1.8477	2681.0	148.9	1.00	57.81	0.087	126.237	0.02428	3.3068	0.004798	69.37052	8.671315
	03-16-2016 17	0	148	1309.7	0.5040	660.1	1.8271	2392.9	134.4	1.00	52.18	0.087	113.9439	0.021915	3.3068	0.004331	62.61514	7.826892
	03-16-2016 18	0	153	1345.2	0.4990	671.3	1.8356	2469.3	138.0	1.00	53.59	0.087	117.0324	0.022509	3.3068	0.004448	64.31235	8.039044
	03-16-2016 19	0	169	1452.1	0.5220	758.0	1.8320	2660.2	149.0	1.00	57.85	0.087	126.3327	0.024298	3.3068	0.004802	69.42311	8.677888
	03-16-2016 20	0	163	1418.9	0.5200	737.8	1.8371	2606.7	145.6	1.00	56.53	0.087	123.4443	0.023743	3.3068	0.004692	67.83586	8.479482
	03-16-2016 21	0	145	1301.5	0.5030	654.7	1.8209	2369.9	133.5	1.00	51.85	0.087	113.2305	0.021778	3.3068	0.004304	62.22311	7.777888
	03-16-2016 22	0	135	1205.5	0.5090	613.6	1.8303	2206.4	123.7	1.00	48.03	0.087	104.8785	0.020172	3.3068	0.003986	57.63347	7.204183
	03-16-2016 23	0	116	1065.9	0.5490	585.2	1.8045	1923.4	109.4	1.00	42.47	0.087	92.7333	0.017836	3.3068	0.003525	50.95936	6.36992
	03-17-2016 00	0	99	967.9	0.5470	529.4	1.7892	1731.8	99.3	1.00	38.56	0.087	84.2073	0.016196	3.3068	0.003201	46.2741	5.784263
	03-17-2016 01	0	99	962.5	0.5700	548.6	1.8006	1733.1	98.8	1.00	38.35	0.087	83.7375	0.016106	3.3068	0.003183	46.01594	5.751992
	03-17-2016 02	0	99	959.6	0.5779	554.6	1.7925	1720.1	98.5	1.00	38.23	0.087	83.4852	0.016057	3.3068	0.003173	45.87729	5.734661
	03-17-2016 03	0	99	969.0	0.5820	564.0	1.7804	1725.2	99.4	1.00	38.61	0.087	84.303	0.016214	3.3068	0.003204	46.32669	5.790837
	03-17-2016 04	0	100	962.8	0.5940	571.9	1.7881	1721.6	98.8	1.00	38.36	0.087	83.7636	0.016111	3.3068	0.003184	46.03028	5.753785
	03-17-2016 05	0	117	1122.8	0.5630	632.1	1.8017	2023.0	115.2	1.00	44.73	0.087	97.6836	0.018788	3.3068	0.003713	53.67968	6.70996
	03-17-2016 06	0	129	1180.2	0.5510	650.3	1.8016	2126.2	121.1	1.00	47.02	0.087	102.6774	0.019748	3.3068	0.003903	56.4239	7.052988
	03-17-2016 07	0	126	1154.0	0.5370	619.7	1.8103	2089.1	118.4	1.00	45.98	0.087	100.398	0.01931	3.3068	0.003816	55.17131	6.896414
	03-17-2016 08	0	126	1151.9	0.5360	617.4	1.8075	2082.1	118.2	1.00	45.89	0.087	100.2153	0.019275	3.3068	0.003809	55.07092	6.883865
	03-17-2016 09	0	124	1136.1	0.5370	610.1	1.8087	2054.9	116.6	1.00	45.26	0.087	98.8407	0.01901	3.3068	0.003757	54.31554	6.789442
	03-17-2016 10	0	106	1013.8	0.5540	561.6	1.7834	1808.0	104.0	1.00	40.39	0.087	88.2006	0.016964	3.3068	0.003352	48.46853	6.058566
	03-17-2016 11	0	111	1061.7	0.5330	565.9	1.7811	1891.0	108.9	1.00	42.30	0.087	92.3679	0.017765	3.3068	0.003511	50.75857	6.348221
	03-17-2016 12	0	119	1101.5	0.5430	598.1	1.8052	1988.4	113.0	1.00	43.88	0.087	95.8305	0.018431	3.3068	0.003642	52.66135	6.582669
	03-17-2016 13	0	131	1184.2	0.5480	648.9	1.7999	2131.4	121.5	1.00	47.18	0.087	103.0254	0.019815	3.3068	0.003916	56.61514	7.076892
	03-17-2016 14	0	118	1108.7	0.5440	603.1	1.8029	1998.9	113.8	1.00	44.17	0.087	96.4569	0.018552	3.3068	0.003666	53.00558	6.625697
	03-17-2016 15	0	109	1031.8	0.5660	584.0	1.7927	1849.7	105.9	1.00	41.11	0.087	89.7666	0.017265	3.3068	0.003412	49.32908	6.166135
	03-17-2016 16	0	102	985.1	0.5800	571.4	1.7831	1756.5	101.1	1.00	39.25	0.087	85.7037	0.016484	3.3068	0.003258	47.09641	5.887052
	03-17-2016 17	0	99	969.1	0.6101	591.2	1.7849	1729.7	99.4	1.00	38.61	0.087	84.3117	0.016216	3.3068	0.003205	46.33147	5.791434
	03-17-2016 18	0	109	1053.9	0.5740	604.9	1.7788	1874.7	108.1	1.00	41.99	0.087	91.6893	0.017635	3.3068	0.003485	50.38566	6.298207
	03-17-2016 19	0	139	1260.6	0.5460	688.3	1.7920	2259.0	129.3	1.00	50.22	0.087	109.6722	0.021094	3.3068	0.004169	60.26773	7.533466
	03-17-2016 20	0	158	1383.6	0.5670	784.5	1.7904	2477.2	142.0	1.00	55.12	0.087	120.3732	0.023152	3.3068	0.004575	66.14821	8.268526
	03-17-2016 21	0	148	1317.9	0.5360	706.4	1.7886	2357.2	135.2	1.00	52.51	0.087	114.6573	0.022053	3.3068	0.004358	63.00717	7.875896
	03-17-2016 22	0	129	1175.4	0.5130	603.0	1.7956	2110.6	120.6	1.00	46.83	0.087	102.2598	0.019668	3.3068	0.003887	56.19442	7.024303
	03-17-2016 23	0	100	976.7	0.4980	486.4	1.7841	1742.5	100.2	1.00	38.91	0.087	84.9729	0.016343	3.3068	0.00323	46.69482	5.836853
	03-18-2016 00	0	99	986.4	0.4710	464.6	1.7878	1763.5	101.2	1.00	39.30	0.087	85.8168	0.016505	3.3068	0.003262	47.15857	5.894821
	03-18-2016 01	0	99	970.5	0.4950	480.4	1.7804	1727.9	99.6	1.00	38.67	0.087	84.4335	0.016239	3.3068	0.003209	46.39841	5.799801
	03-18-2016 02	0	99	967.1	0.5140	497.1	1.7625	1704.5	99.2	1.00	38.53	0.087	84.1377	0.016183	3.3068	0.003198	46.23586	5.779482
	03-18-2016 03	0	99	954.0	0.5280	503.7	1.7777	1695.9	97.9	1.00	38.01	0.087	82.998	0.015963	3.3068	0.003155	45.60956	5.701195
	03-18-2016 04	0	101	973.5	0.5170	503.3	1.7712	1724.3	99.9	1.00	38.78	0.087	84.6945	0.01629	3.3068	0.003219	46.54183	5.817729
	03-18-2016 05	0	146	1309.0	0.5700	746.1	1.7931	2347.2	134.3	1.00	52.15	0.087	113.883	0.021904	3.3068	0.004329	62.58167	7.822709
	03-18-2016 06	0	157	1361.1	0.5510	750.0	1.8016	2452.1	139.7	1.00	54.23	0.087	118.4157	0.022775	3.3068	0.004501	65.07251	8.134064
	03-18-2016 07	0	153	1344.9	0.5080	683.2	1.8000	2420.8	138.0	1.00	53.58	0.087	117.0063	0.022504	3.3068	0.004447	64.29801	8.037251
	03-18-2016 08	0	163	1412.0	0.4990	704.6	1.8142	2561.7	144.9	1.00	56.25	0.087	122.844	0.023627	3.3068	0.004669	67.50598	8.438247
	03-18-2016 09	0	170	1473.3	0.5090	749.9	1.8174	2677.6	151.2	1.00	58.70	0.087	128.1771	0.024653	3.3068	0.004872	70.43665	8.804582
	03-18-2016 10	0	173	1484.9	0.5400	801.8	1.8216	2704.9	152.3	1.00	59.16	0.087	129.1863	0.024847	3.3068	0.00491	70.99124	8.873904
	03-18-2016 11	0	174	1500.2	0.5390	808.6	1.8110	2716.9	153.9	1.00	59.77	0.087	130.5174	0.025103	3.3068	0.004961	71.72271	8.965339
	03-18-2016 12	0	174	1491.9	0.5460	814.6	1.8007	2686.5	153.1	1.00	59.44	0.087	129.7953	0.024964	3.3068	0.004933	71.3259	8.915737
	03-18-2016 13	0	174	1492.0	0.5460	814.6	1.7928	2674.9	153.1	1.00	59.44	0.087	129.804	0.024966	3.3068	0.004934	71.33068	8.916335

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-18-2016 14	0	174	1498.3	0.5520	827.1	1.7888	2680.2	153.7	1.00	59.69	0.087	130.3521	0.025071	3.3068	0.004955	71.63187	8.953984
	03-18-2016 15	0	175	1498.8	0.5580	836.3	1.7795	2667.1	153.8	1.00	59.71	0.087	130.3956	0.02508	3.3068	0.004956	71.65578	8.956972
	03-18-2016 16	0	174	1496.1	0.5650	845.3	1.7842	2669.3	153.5	1.00	59.61	0.087	130.1607	0.025034	3.3068	0.004947	71.52669	8.940837
	03-18-2016 17	0	175	1494.8	0.5740	858.0	1.7838	2666.4	153.4	1.00	59.55	0.087	130.0476	0.025013	3.3068	0.004943	71.46454	8.933068
	03-18-2016 18	0	176	1499.9	0.5620	842.9	1.7825	2673.6	153.9	1.00	59.76	0.087	130.4913	0.025098	3.3068	0.00496	71.70837	8.963546
	03-18-2016 19	0	175	1504.5	0.5640	848.5	1.7922	2696.3	154.4	1.00	59.94	0.087	130.8915	0.025175	3.3068	0.004975	71.92829	8.991036
	03-18-2016 20	0	175	1507.0	0.5640	849.9	1.7958	2706.3	154.6	1.00	60.04	0.087	131.109	0.025217	3.3068	0.004983	72.04781	9.005976
	03-18-2016 21	0	175	1505.4	0.5610	844.5	1.8045	2716.5	154.5	1.00	59.98	0.087	130.9698	0.02519	3.3068	0.004978	71.97131	8.996414
	03-18-2016 22	0	164	1413.8	0.5760	814.3	1.8038	2550.2	145.1	1.00	56.33	0.087	123.0006	0.023657	3.3068	0.004675	67.59203	8.449004
	03-18-2016 23	0	103	987.6	0.5520	545.2	1.7850	1762.9	101.3	1.00	39.35	0.087	85.9212	0.016526	3.3068	0.003266	47.21594	5.901992
	03-19-2016 00	0	98	967.5	0.5730	554.4	1.7838	1725.8	99.3	1.00	38.55	0.087	84.1725	0.016189	3.3068	0.003199	46.25498	5.781873
	03-19-2016 01	0	98	980.2	0.5380	527.3	1.7606	1725.7	100.6	1.00	39.05	0.087	85.2774	0.016402	3.3068	0.003241	46.86215	5.857769
	03-19-2016 02	0	98	953.0	0.5510	525.1	1.7550	1672.5	97.8	1.00	37.97	0.087	82.911	0.015947	3.3068	0.003151	45.56175	5.695219
	03-19-2016 03	0	98	939.3	0.5580	524.1	1.7691	1661.7	96.4	1.00	37.42	0.087	81.7191	0.015717	3.3068	0.003106	44.90677	5.613347
	03-19-2016 04	0	98	919.2	0.5530	508.3	1.7617	1619.4	94.3	1.00	36.62	0.087	79.9704	0.015381	3.3068	0.00304	43.94582	5.493227
	03-19-2016 05	0	135	1204.2	0.5710	687.6	1.7613	2120.9	123.5	1.00	47.98	0.087	104.7654	0.02015	3.3068	0.003982	57.57131	7.196414
	03-19-2016 06	0	175	1470.9	0.5730	842.8	1.7793	2617.1	150.9	1.00	58.60	0.087	123.9683	0.024613	3.3068	0.004864	70.32191	8.790239
	03-19-2016 07	0	175	1471.9	0.5540	815.4	1.7739	2611.0	151.0	1.00	58.64	0.087	128.0553	0.024629	3.3068	0.004867	70.36972	8.796215
	03-19-2016 08	0	174	1459.3	0.5380	785.1	1.7927	2616.1	149.7	1.00	58.14	0.087	126.9591	0.024419	3.3068	0.004826	69.76733	8.720916
	03-19-2016 09	0	174	1471.0	0.5170	760.5	1.7833	2623.2	150.9	1.00	58.61	0.087	127.977	0.024614	3.3068	0.004864	70.32669	8.790837
	03-19-2016 10	0	175	1477.5	0.5250	775.7	1.7832	2634.7	151.6	1.00	58.86	0.087	128.5425	0.024723	3.3068	0.004886	70.33745	8.829581
	03-19-2016 11	0	175	1481.5	0.5470	810.4	1.7740	2628.2	152.0	1.00	59.02	0.087	128.8905	0.02479	3.3068	0.004899	70.82869	8.853586
	03-19-2016 12	0	175	1478.5	0.5440	804.3	1.7769	2627.1	151.7	1.00	58.90	0.087	128.6295	0.02474	3.3068	0.004889	70.68526	8.835657
	03-19-2016 13	0	175	1476.9	0.5450	804.9	1.7904	2644.2	151.5	1.00	58.84	0.087	128.4903	0.024713	3.3068	0.004884	70.60876	8.826096
	03-19-2016 14	0	175	1475.8	0.5460	805.8	1.7940	2647.6	151.4	1.00	58.80	0.087	128.3946	0.024695	3.3068	0.00488	70.55618	8.819522
	03-19-2016 15	0	175	1475.5	0.5450	804.1	1.7967	2651.1	151.4	1.00	58.78	0.087	128.3685	0.02469	3.3068	0.004879	70.54183	8.817729
	03-19-2016 16	0	176	1477.4	0.5450	805.2	1.8054	2667.3	151.6	1.00	58.86	0.087	128.5338	0.024721	3.3068	0.004885	70.63267	8.829084
	03-19-2016 17	0	175	1475.9	0.5540	817.6	1.8129	2675.6	151.4	1.00	58.80	0.087	128.4033	0.024696	3.3068	0.00488	70.56096	8.82012
	03-19-2016 18	0	174	1451.0	0.5600	812.6	1.8293	2654.3	148.9	1.00	57.81	0.087	126.237	0.02428	3.3068	0.004798	69.37052	8.671315
	03-19-2016 19	0	174	1458.3	0.5480	799.1	1.8408	2684.5	149.6	1.00	58.10	0.087	126.8721	0.024402	3.3068	0.004822	69.71952	8.71494
	03-19-2016 20	0	174	1453.2	0.5440	790.5	1.8485	2686.3	149.1	1.00	57.90	0.087	126.4284	0.024316	3.3068	0.004805	69.4757	8.684462
	03-19-2016 21	0	174	1452.8	0.5420	787.4	1.8593	2701.2	149.1	1.00	57.88	0.087	126.3936	0.02431	3.3068	0.004804	69.45657	8.682072
	03-19-2016 22	0	174	1456.0	0.5520	803.7	1.8590	2706.7	149.4	1.00	58.01	0.087	126.672	0.024363	3.3068	0.004815	69.60956	8.701195
	03-19-2016 23	0	173	1453.9	0.5570	809.8	1.8621	2707.3	149.2	1.00	57.92	0.087	126.4893	0.024328	3.3068	0.004808	69.50916	8.688645
	03-20-2016 00	0	163	1377.4	0.5690	783.7	1.8608	2563.1	141.3	1.00	54.88	0.087	119.8338	0.023048	3.3068	0.004555	65.85179	8.231474
	03-20-2016 01	0	126	1111.5	0.5450	605.8	1.8545	2061.3	114.0	1.00	44.28	0.087	96.7005	0.018599	3.3068	0.003675	53.13944	6.64243
	03-20-2016 02	0	126	1115.2	0.5420	604.4	1.8555	2080.4	114.4	1.00	44.43	0.087	97.0224	0.018661	3.3068	0.003688	53.31633	6.664542
	03-20-2016 03	0	126	1121.0	0.5480	614.3	1.8572	2081.9	115.0	1.00	44.66	0.087	97.527	0.018758	3.3068	0.003707	53.59363	6.699203
	03-20-2016 04	0	162	1381.1	0.5620	776.2	1.8825	2599.9	141.7	1.00	55.02	0.087	120.1557	0.02311	3.3068	0.004567	66.02869	8.253586
	03-20-2016 05	0	175	1463.9	0.5320	778.8	1.9022	2784.7	150.2	1.00	58.32	0.087	127.3593	0.024496	3.3068	0.004841	69.98725	8.748406
	03-20-2016 06	0	174	1471.5	0.5220	768.1	1.9011	2797.4	151.0	1.00	58.63	0.087	128.0205	0.024623	3.3068	0.004865	70.3506	8.793825
	03-20-2016 07	0	175	1464.3	0.5200	761.4	1.9169	2806.9	150.2	1.00	58.34	0.087	127.3941	0.024502	3.3068	0.004842	70.00637	8.750797
	03-20-2016 08	0	174	1457.3	0.5140	749.1	1.9367	2822.4	149.5	1.00	58.06	0.087	126.7851	0.024385	3.3068	0.004819	69.67171	8.708964
	03-20-2016 09	0	174	1457.9	0.4940	720.2	1.9519	2845.7	149.6	1.00	58.08	0.087	126.8373	0.024395	3.3068	0.004821	69.7004	8.71255
	03-20-2016 10	0	174	1471.7	0.4910	722.6	1.9444	2861.5	151.0	1.00	58.63	0.087	128.0379	0.024626	3.3068	0.004867	70.36015	8.79502
	03-20-2016 11	0	174	1470.8	0.4990	733.9	1.9395	2852.6	150.9	1.00	58.60	0.087	127.9596	0.024611	3.3068	0.004864	70.31713	8.789641
	03-20-2016 12	0	173	1455.6	0.5200	756.9	1.9425	2827.5	149.3	1.00	57.99	0.087	126.6372	0.024357	3.3068	0.004813	69.59044	8.698805

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-20-2016 13	0	171	1449.6	0.5150	746.5	1.9247	2790.0	148.7	1.00	57.75	0.087	126.1152	0.024256	3.3068	0.004793	69.30359	8.662948
	03-20-2016 14	0	170	1444.4	0.5120	739.5	1.9337	2793.1	148.2	1.00	57.55	0.087	125.6628	0.024169	3.3068	0.004776	69.05498	8.631873
	03-20-2016 15	0	170	1439.7	0.5190	747.2	1.9237	2769.6	147.7	1.00	57.36	0.087	125.2539	0.024091	3.3068	0.004761	68.83028	8.603785
	03-20-2016 16	0	169	1422.3	0.5180	736.8	1.9355	2752.9	145.9	1.00	56.67	0.087	123.7401	0.023799	3.3068	0.004703	67.99841	8.499801
	03-20-2016 17	0	167	1411.6	0.5130	724.2	1.9248	2717.1	144.8	1.00	56.24	0.087	122.8092	0.02362	3.3068	0.004668	67.48685	8.435857
	03-20-2016 18	0	166	1391.4	0.5390	750.0	1.9169	2667.2	142.8	1.00	55.43	0.087	121.0518	0.023282	3.3068	0.004601	66.52112	8.315139
	03-20-2016 19	0	166	1403.6	0.5360	752.3	1.8981	2664.2	144.0	1.00	55.92	0.087	122.1132	0.023487	3.3068	0.004641	67.10438	8.388048
	03-20-2016 20	0	165	1404.7	0.5280	741.7	1.8880	2652.1	144.1	1.00	55.96	0.087	122.2089	0.023505	3.3068	0.004645	67.15697	8.394622
	03-20-2016 21	0	165	1388.6	0.5300	736.0	1.8869	2620.1	142.5	1.00	55.32	0.087	120.8082	0.023236	3.3068	0.004592	66.38725	8.298406
	03-20-2016 22	0	165	1386.7	0.5270	730.8	1.8855	2614.6	142.3	1.00	55.25	0.087	120.6429	0.023204	3.3068	0.004586	66.29641	8.287052
	03-20-2016 23	0	164	1384.5	0.5240	725.5	1.8697	2588.6	142.1	1.00	55.16	0.087	120.4515	0.023167	3.3068	0.004578	66.19124	8.273904
	03-21-2016 00	0	164	1384.8	0.5210	721.5	1.8684	2587.4	142.1	1.00	55.17	0.087	120.4776	0.023172	3.3068	0.004579	66.20558	8.275697
	03-21-2016 01	0	164	1389.0	0.5250	729.2	1.8613	2585.3	142.5	1.00	55.34	0.087	120.843	0.023242	3.3068	0.004592	66.38725	8.298406
	03-21-2016 02	0	164	1388.0	0.5270	731.5	1.8370	2549.8	142.4	1.00	55.30	0.087	120.756	0.023225	3.3068	0.00459	66.35857	8.294821
	03-21-2016 03	0	164	1388.3	0.5290	734.4	1.8261	2535.2	142.4	1.00	55.31	0.087	120.7821	0.023231	3.3068	0.004591	66.37291	8.296614
	03-21-2016 04	0	164	1388.1	0.5300	735.7	1.8187	2524.5	142.4	1.00	55.30	0.087	120.7647	0.023227	3.3068	0.00459	66.36335	8.295418
	03-21-2016 05	0	166	1393.4	0.5350	745.5	1.7944	2500.3	143.0	1.00	55.51	0.087	121.2258	0.023316	3.3068	0.004608	66.61673	8.327092
	03-21-2016 06	0	166	1412.8	0.5370	758.7	1.7690	2499.3	144.9	1.00	56.29	0.087	122.9136	0.02364	3.3068	0.004672	67.54422	8.443028
	03-21-2016 07	0	168	1413.5	0.5290	747.7	1.7660	2496.2	145.0	1.00	56.31	0.087	122.9745	0.023652	3.3068	0.004674	67.57769	8.447211
	03-21-2016 08	0	169	1426.6	0.5230	746.1	1.7430	2486.6	146.4	1.00	56.84	0.087	124.1142	0.023871	3.3068	0.004717	68.20398	8.525498
	03-21-2016 09	0	169	1425.8	0.5010	714.3	1.7337	2471.9	146.3	1.00	56.80	0.087	124.0446	0.023858	3.3068	0.004715	68.16574	8.520717
	03-21-2016 10	0	168	1416.3	0.4970	703.9	1.7406	2465.2	145.3	1.00	56.43	0.087	123.2181	0.023699	3.3068	0.004683	67.71155	8.463944
	03-21-2016 11	0	168	1419.6	0.5040	715.5	1.7230	2446.0	145.6	1.00	56.56	0.087	123.5052	0.023754	3.3068	0.004694	67.86932	8.483665
	03-21-2016 12	0	167	1417.0	0.5270	746.8	1.7261	2445.9	145.4	1.00	56.45	0.087	123.279	0.023711	3.3068	0.004686	67.74502	8.468127
	03-21-2016 13	0	167	1409.0	0.5500	775.0	1.7163	2418.3	144.6	1.00	56.14	0.087	122.583	0.023577	3.3068	0.004659	67.36255	8.420319
	03-21-2016 14	0	166	1415.4	0.5440	770.0	1.6972	2402.2	145.2	1.00	56.39	0.087	123.1398	0.023684	3.3068	0.00468	67.66853	8.458566
	03-21-2016 15	0	166	1411.2	0.5370	757.8	1.6918	2387.4	144.8	1.00	56.22	0.087	122.7744	0.023614	3.3068	0.004667	67.46773	8.433466
	03-21-2016 16	0	166	1411.7	0.5110	721.4	1.6839	2377.1	144.8	1.00	56.24	0.087	122.8179	0.023622	3.3068	0.004668	67.49163	8.436454
	03-21-2016 17	0	166	1415.8	0.5470	774.4	1.6578	2347.1	145.3	1.00	56.41	0.087	123.1746	0.023691	3.3068	0.004682	67.68765	8.460956
	03-21-2016 18	0	168	1420.7	0.5650	802.7	1.6413	2331.8	145.8	1.00	56.60	0.087	123.6009	0.023773	3.3068	0.004698	67.92191	8.490239
	03-21-2016 19	0	169	1425.7	0.5710	814.1	1.6265	2318.9	146.3	1.00	56.80	0.087	124.0359	0.023856	3.3068	0.004714	68.16096	8.52012
	03-21-2016 20	0	169	1436.7	0.5690	817.5	1.6175	2323.9	147.4	1.00	57.24	0.087	124.9929	0.02404	3.3068	0.004751	68.68685	8.585857
	03-21-2016 21	0	169	1442.0	0.5660	816.2	1.6119	2324.4	147.9	1.00	57.45	0.087	125.454	0.024129	3.3068	0.004768	68.94024	8.61753
	03-21-2016 22	0	168	1431.0	0.5720	818.5	1.6164	2313.0	146.8	1.00	57.01	0.087	124.497	0.023945	3.3068	0.004732	68.41434	8.551793
	03-21-2016 23	0	135	1171.9	0.5370	629.3	1.6162	1894.0	120.2	1.00	46.69	0.087	101.9553	0.019609	3.3068	0.003875	56.02709	7.003386
	03-22-2016 00	0	129	1144.3	0.5070	580.2	1.6067	1838.6	117.4	1.00	45.59	0.087	99.5541	0.019148	3.3068	0.003784	54.70757	6.838446
	03-22-2016 01	0	124	1097.1	0.5370	589.1	1.6019	1757.4	112.6	1.00	43.71	0.087	95.4477	0.018358	3.3068	0.003628	52.451	6.556375
	03-22-2016 02	0	131	1174.8	0.5510	647.3	1.5968	1875.9	120.5	1.00	46.80	0.087	102.2076	0.019658	3.3068	0.003885	56.16574	7.020717
	03-22-2016 03	0	116	1021.7	0.4460	455.7	1.6074	1642.3	104.8	1.00	40.71	0.087	88.8879	0.017096	3.3068	0.003379	48.84622	6.105777
	03-22-2016 04	0	108	974.6	0.4270	416.2	1.6032	1562.5	100.0	1.00	38.83	0.087	84.7902	0.016308	3.3068	0.003223	46.59442	5.824303
	03-22-2016 05	0	110	988.6	0.4560	450.8	1.5819	1563.9	101.4	1.00	39.39	0.087	86.0082	0.016542	3.3068	0.003269	47.26375	5.907968
	03-22-2016 06	0	111	984.9	0.4600	453.1	1.5952	1571.1	101.1	1.00	39.24	0.087	85.6863	0.01648	3.3068	0.003257	47.08685	5.885857
	03-22-2016 07	0	110	986.6	0.4589	452.8	1.6045	1583.0	101.2	1.00	39.31	0.087	85.8342	0.016509	3.3068	0.003262	47.16813	5.896016
	03-22-2016 08	0	106	941.3	0.4740	446.2	1.6313	1535.5	96.6	1.00	37.50	0.087	81.8931	0.015751	3.3068	0.003113	45.00239	5.625299
	03-22-2016 09	0	109	974.5	0.4700	458.0	1.6416	1599.7	100.0	1.00	38.82	0.087	84.7815	0.016306	3.3068	0.003222	46.58964	5.823705
	03-22-2016 10	0	111	994.4	0.4480	445.5	1.6622	1652.9	102.0	1.00	39.62	0.087	86.5128	0.016639	3.3068	0.003288	47.54104	5.942629
	03-22-2016 11	0	111	1009.4	0.4220	426.0	1.6632	1678.8	103.6	1.00	40.22	0.087	87.8178	0.01689	3.3068	0.003338	48.25817	6.032271

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-22-2016 12	0	112	984.7	0.4320	425.4	1.6797	1654.0	101.0	1.00	39.23	0.087	85.6689	0.016477	3.3068	0.003256	47.07729	5.884661
	03-22-2016 13	0	104	929.8	0.4500	418.4	1.6881	1569.6	95.4	1.00	37.04	0.087	80.8926	0.015558	3.3068	0.003075	44.45259	5.556574
	03-22-2016 14	0	104	940.4	0.4700	442.0	1.6810	1580.8	96.5	1.00	37.47	0.087	81.8148	0.015736	3.3068	0.00311	44.95936	5.61992
	03-22-2016 15	0	112	991.5	0.5160	511.6	1.6928	1678.4	101.7	1.00	39.50	0.087	86.2605	0.016591	3.3068	0.003279	47.40239	5.925299
	03-22-2016 16	0	113	1008.2	0.5260	530.3	1.6749	1688.6	103.4	1.00	40.17	0.087	87.7134	0.01687	3.3068	0.003334	48.2008	6.0251
	03-22-2016 17	0	105	939.3	0.5360	503.5	1.6625	1561.6	96.4	1.00	37.42	0.087	81.7191	0.015717	3.3068	0.003106	44.90677	5.613347
	03-22-2016 18	0	110	976.2	0.5260	513.5	1.6585	1619.0	100.2	1.00	38.89	0.087	84.9294	0.016335	3.3068	0.003228	46.67092	5.833865
	03-22-2016 19	0	107	1022.7	0.5420	554.3	1.6320	1669.0	104.9	1.00	40.75	0.087	88.9749	0.017113	3.3068	0.003382	48.89402	6.111753
	03-22-2016 20	0	108	1030.8	0.5400	556.6	1.6120	1661.7	105.8	1.00	41.07	0.087	89.6796	0.017248	3.3068	0.003409	49.28127	6.160159
	03-22-2016 21	0	102	976.3	0.5600	546.7	1.6061	1568.0	100.2	1.00	38.90	0.087	84.9381	0.016336	3.3068	0.003228	46.6757	5.834462
	03-22-2016 22	0	106	1022.5	0.5410	553.2	1.5951	1631.0	104.9	1.00	40.74	0.087	88.9575	0.01711	3.3068	0.003381	48.88446	6.110558
	03-22-2016 23	0	99	960.5	0.5690	546.5	1.5880	1525.3	98.5	1.00	38.27	0.087	83.5635	0.016072	3.3068	0.003176	45.92032	5.74004
	03-23-2016 00	0	100	959.7	0.5719	548.9	1.5903	1526.2	98.5	1.00	38.24	0.087	83.4939	0.016059	3.3068	0.003174	45.88207	5.735259
	03-23-2016 01	0	99	956.4	0.5720	547.1	1.5861	1516.9	98.1	1.00	38.10	0.087	83.2068	0.016004	3.3068	0.003163	45.7243	5.715538
	03-23-2016 02	0	99	961.8	0.5760	554.0	1.5714	1511.4	98.7	1.00	38.32	0.087	83.6766	0.016094	3.3068	0.00318	45.98247	5.747809
	03-23-2016 03	0	108	1025.7	0.5560	570.3	1.5757	1616.2	105.2	1.00	40.86	0.087	89.2359	0.017163	3.3068	0.003392	49.03745	6.129681
	03-23-2016 04	0	132	1207.7	0.5590	675.1	1.5764	1903.8	123.9	1.00	48.12	0.087	105.0699	0.020209	3.3068	0.003994	57.73865	7.217331
	03-23-2016 05	0	148	1321.5	0.5180	684.5	1.6087	2125.9	135.6	1.00	52.65	0.087	114.9705	0.022113	3.3068	0.00437	63.17928	7.89741
	03-23-2016 06	0	142	1258.1	0.5220	656.7	1.6255	2045.1	129.1	1.00	50.12	0.087	109.4547	0.021052	3.3068	0.00416	60.14821	7.518526
	03-23-2016 07	0	150	1338.8	0.5050	676.1	1.6414	2197.5	137.4	1.00	53.34	0.087	116.4756	0.022402	3.3068	0.004427	64.00637	8.000797
	03-23-2016 08	0	139	1248.1	0.4780	596.6	1.6339	2039.3	128.1	1.00	49.73	0.087	108.5847	0.020885	3.3068	0.004127	59.67012	7.458765
	03-23-2016 09	0	149	1340.8	0.4850	650.3	1.6434	2203.5	137.6	1.00	53.42	0.087	116.6496	0.022436	3.3068	0.004434	64.10199	8.012749
	03-23-2016 10	0	144	1289.1	0.4930	635.5	1.6442	2119.5	132.3	1.00	51.36	0.087	112.1517	0.021571	3.3068	0.004263	61.63028	7.703785
	03-23-2016 11	0	161	1410.3	0.5020	708.0	1.6726	2358.9	144.7	1.00	56.19	0.087	122.6961	0.023599	3.3068	0.004664	67.4247	8.428088
	03-23-2016 12	0	163	1414.2	0.5090	719.8	1.7021	2407.1	145.1	1.00	56.34	0.087	123.0354	0.023664	3.3068	0.004676	67.61116	8.451394
	03-23-2016 13	0	156	1365.3	0.4920	671.7	1.7220	2351.0	140.1	1.00	54.39	0.087	118.7811	0.022846	3.3068	0.004515	65.27331	8.159163
	03-23-2016 14	0	139	1264.0	0.4640	586.5	1.7424	2202.4	129.7	1.00	50.36	0.087	109.968	0.021151	3.3068	0.00418	60.43028	7.553785
	03-23-2016 15	0	137	1243.7	0.4680	582.1	1.7697	2201.0	127.6	1.00	49.55	0.087	108.2019	0.020811	3.3068	0.004113	59.45976	7.43247
	03-23-2016 16	0	148	1329.7	0.5040	670.2	1.7972	2389.7	136.4	1.00	52.98	0.087	115.6839	0.02225	3.3068	0.004397	63.57131	7.946414
	03-23-2016 17	0	163	1420.0	0.5290	751.2	1.8116	2572.5	145.7	1.00	56.57	0.087	123.54	0.023761	3.3068	0.004696	67.88845	8.486056
	03-23-2016 18	0	162	1409.3	0.5010	706.1	1.8361	2587.6	144.6	1.00	56.15	0.087	122.6091	0.023582	3.3068	0.00466	67.37689	8.422112
	03-23-2016 19	0	166	1461.3	0.4940	721.9	1.8374	2685.0	149.9	1.00	58.22	0.087	127.1331	0.024452	3.3068	0.004832	69.86295	8.732869
	03-23-2016 20	0	165	1453.5	0.4920	715.1	1.8473	2685.1	149.1	1.00	57.91	0.087	126.4545	0.024322	3.3068	0.004806	69.49004	8.686255
	03-23-2016 21	0	140	1262.5	0.4630	584.5	1.8593	2347.4	129.5	1.00	50.30	0.087	109.8375	0.021125	3.3068	0.004175	60.35857	7.544821
	03-23-2016 22	0	138	1273.5	0.4730	602.4	1.8842	2399.5	130.7	1.00	50.74	0.087	110.7945	0.02131	3.3068	0.004211	60.88446	7.610558
	03-23-2016 23	0	143	1295.7	0.5050	654.3	1.8752	2429.7	132.9	1.00	51.62	0.087	112.7259	0.021681	3.3068	0.004285	61.94582	7.743227
	03-24-2016 00	0	162	1424.4	0.5320	757.8	1.8818	2680.4	146.1	1.00	56.75	0.087	123.9228	0.023835	3.3068	0.00471	68.0988	8.512351
	03-24-2016 01	0	166	1450.1	0.5350	775.8	1.8868	2736.1	148.8	1.00	57.77	0.087	126.1587	0.024265	3.3068	0.004795	69.32749	8.665936
	03-24-2016 02	0	165	1432.4	0.5380	770.6	1.9017	2724.0	147.0	1.00	57.07	0.087	124.6188	0.023968	3.3068	0.004737	68.48127	8.560159
	03-24-2016 03	0	163	1427.7	0.5280	753.8	1.9047	2719.4	146.5	1.00	56.88	0.087	124.2099	0.02389	3.3068	0.004721	68.25657	8.532072
	03-24-2016 04	0	155	1379.2	0.5280	728.2	1.9018	2623.0	141.5	1.00	54.95	0.087	119.9904	0.023078	3.3068	0.004561	65.93785	8.242231
	03-24-2016 05	0	159	1391.1	0.5280	734.5	1.8981	2640.4	142.7	1.00	55.42	0.087	121.0257	0.023277	3.3068	0.0046	66.50677	8.313347
	03-24-2016 06	0	163	1420.8	0.5450	774.3	1.8958	2693.6	145.8	1.00	56.61	0.087	123.6096	0.023774	3.3068	0.004698	67.92669	8.490837
	03-24-2016 07	0	163	1401.1	0.5580	781.8	1.9043	2668.1	143.8	1.00	55.82	0.087	121.8957	0.023445	3.3068	0.004633	66.98486	8.373108
	03-24-2016 08	0	163	1411.7	0.5470	772.2	1.8777	2650.7	144.8	1.00	56.24	0.087	122.8179	0.023622	3.3068	0.004658	67.49163	8.436454
	03-24-2016 09	0	163	1406.7	0.5540	779.3	1.8683	2628.2	144.3	1.00	56.04	0.087	122.3829	0.023538	3.3068	0.004652	67.25259	8.406574
	03-24-2016 10	0	165	1402.2	0.5500	771.2	1.8808	2637.2	143.9	1.00	55.86	0.087	121.9914	0.023463	3.3068	0.004637	67.03745	8.379681

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-24-2016 11	0	166	1425.1	0.5510	785.2	1.8606	2651.5	146.2	1.00	56.78	0.087	123.9837	0.023846	3.3068	0.004712	68.13227	8.516534
	03-24-2016 12	0	166	1405.2	0.5630	791.1	1.8743	2633.7	144.2	1.00	55.98	0.087	122.2524	0.023513	3.3068	0.004647	67.18088	8.39761
	03-24-2016 13	0	166	1408.1	0.5630	792.8	1.8639	2624.5	144.5	1.00	56.10	0.087	122.5047	0.023562	3.3068	0.004656	67.31952	8.41494
	03-24-2016 14	0	165	1408.2	0.5650	795.6	1.8529	2609.2	144.5	1.00	56.10	0.087	122.5134	0.023564	3.3068	0.004657	67.3243	8.415538
	03-24-2016 15	0	166	1421.9	0.5640	802.0	1.8348	2608.9	145.9	1.00	56.65	0.087	123.7053	0.023793	3.3068	0.004702	67.97928	8.49741
	03-24-2016 16	0	166	1425.2	0.5630	802.4	1.8371	2618.2	146.2	1.00	56.78	0.087	123.9924	0.023848	3.3068	0.004713	68.13705	8.517131
	03-24-2016 17	0	167	1438.7	0.5050	726.5	1.8394	2646.4	147.6	1.00	57.32	0.087	125.1669	0.024074	3.3068	0.004757	68.78247	8.597809
	03-24-2016 18	0	167	1423.2	0.5060	720.1	1.8475	2629.4	146.0	1.00	56.70	0.087	123.8184	0.023815	3.3068	0.004706	68.04143	8.505179
	03-24-2016 19	0	167	1425.9	0.5020	715.8	1.8459	2632.1	146.3	1.00	56.81	0.087	124.0533	0.02386	3.3068	0.004715	68.17052	8.521315
	03-24-2016 20	0	167	1440.8	0.4980	717.5	1.8276	2633.2	147.8	1.00	57.40	0.087	125.3496	0.024109	3.3068	0.004764	68.88287	8.610359
	03-24-2016 21	0	167	1448.4	0.5020	727.1	1.8381	2662.3	148.6	1.00	57.71	0.087	126.0108	0.024236	3.3068	0.00479	69.24622	8.655777
	03-24-2016 22	0	167	1456.4	0.4960	722.4	1.8367	2675.0	149.4	1.00	58.02	0.087	126.7068	0.02437	3.3068	0.004816	69.62869	8.703586
	03-24-2016 23	0	167	1458.0	0.4960	723.2	1.8522	2700.5	149.6	1.00	58.09	0.087	126.846	0.024397	3.3068	0.004821	69.70518	8.713147
	03-25-2016 00	0	167	1461.3	0.4950	723.3	1.8542	2709.5	149.9	1.00	58.22	0.087	127.1331	0.024452	3.3068	0.004832	69.86295	8.732869
	03-25-2016 01	0	166	1444.0	0.5090	735.0	1.8721	2703.3	148.1	1.00	57.53	0.087	125.628	0.024163	3.3068	0.004775	69.03586	8.629482
	03-25-2016 02	0	166	1452.5	0.5020	729.2	1.8348	2665.0	149.0	1.00	57.87	0.087	126.3675	0.024305	3.3068	0.004803	69.44223	8.680279
	03-25-2016 03	0	166	1452.5	0.4980	723.3	1.8338	2663.6	149.0	1.00	57.87	0.087	126.3675	0.024305	3.3068	0.004803	69.44223	8.680279
	03-25-2016 04	0	166	1454.4	0.4940	718.5	1.8470	2686.3	149.2	1.00	57.94	0.087	126.5328	0.024337	3.3068	0.004809	69.53307	8.691633
	03-25-2016 05	0	166	1455.3	0.4970	723.3	1.8191	2647.3	149.3	1.00	57.98	0.087	126.6111	0.024352	3.3068	0.004812	69.5761	8.697012
	03-25-2016 06	0	167	1459.9	0.4950	722.7	1.8272	2667.6	149.8	1.00	58.16	0.087	127.0113	0.024429	3.3068	0.004828	69.79602	8.724502
	03-25-2016 07	0	166	1464.1	0.4950	724.7	1.8279	2676.3	150.2	1.00	58.33	0.087	127.3767	0.024499	3.3068	0.004841	69.99681	8.749602
	03-25-2016 08	0	167	1464.2	0.4930	721.9	1.8227	2668.8	150.2	1.00	58.33	0.087	127.3854	0.024501	3.3068	0.004842	70.00159	8.750199
	03-25-2016 09	0	166	1456.4	0.4980	725.3	1.8427	2683.7	149.4	1.00	58.02	0.087	126.7068	0.02437	3.3068	0.004816	69.62869	8.703586
	03-25-2016 10	0	167	1453.3	0.5010	728.1	1.8467	2683.8	149.1	1.00	57.90	0.087	126.4371	0.024318	3.3068	0.004806	69.48048	8.68506
	03-25-2016 11	0	168	1466.8	0.4950	726.1	1.8311	2685.9	150.5	1.00	58.44	0.087	127.6116	0.024544	3.3068	0.00485	70.1259	8.765737
	03-25-2016 12	0	168	1470.5	0.4980	732.3	1.8188	2674.5	150.9	1.00	58.59	0.087	127.9335	0.024606	3.3068	0.004863	70.30279	8.787849
	03-25-2016 13	0	169	1467.4	0.4990	732.2	1.8210	2672.2	150.6	1.00	58.46	0.087	127.6638	0.024554	3.3068	0.004852	70.15458	8.769323
	03-25-2016 14	0	168	1465.3	0.5020	735.6	1.8207	2667.9	150.3	1.00	58.38	0.087	127.4811	0.024519	3.3068	0.004845	70.05418	8.756773
	03-25-2016 15	0	168	1466.2	0.5050	740.4	1.8181	2665.7	150.4	1.00	58.41	0.087	127.5594	0.024534	3.3068	0.004848	70.09721	8.762151
	03-25-2016 16	0	169	1466.6	0.5050	740.6	1.8304	2684.5	150.5	1.00	58.43	0.087	127.5942	0.024541	3.3068	0.00485	70.11633	8.764542
	03-25-2016 17	0	169	1467.8	0.5040	739.8	1.8337	2691.5	150.6	1.00	58.48	0.087	127.6986	0.024561	3.3068	0.004854	70.17371	8.771713
	03-25-2016 18	0	169	1483.6	0.4990	740.3	1.8275	2711.3	152.2	1.00	59.11	0.087	129.0732	0.024825	3.3068	0.004906	70.92908	8.866135
	03-25-2016 19	0	168	1488.8	0.5010	745.9	1.8503	2754.7	152.8	1.00	59.31	0.087	129.5256	0.024912	3.3068	0.004923	71.17769	8.897211
	03-25-2016 20	0	169	1482.8	0.4980	738.4	1.8496	2742.6	152.1	1.00	59.08	0.087	129.0036	0.024812	3.3068	0.004903	70.89084	8.861355
	03-25-2016 21	0	169	1492.9	0.4990	745.0	1.8503	2762.3	153.2	1.00	59.48	0.087	129.8823	0.024981	3.3068	0.004937	71.37371	8.921713
	03-25-2016 22	0	170	1494.2	0.4990	745.6	1.8397	2748.9	153.3	1.00	59.53	0.087	129.9954	0.025003	3.3068	0.004941	71.43586	8.929482
	03-25-2016 23	0	127	1163.5	0.5600	651.6	1.8376	2138.1	119.4	1.00	46.35	0.087	101.2245	0.019469	3.3068	0.003847	55.6255	6.953187
	03-26-2016 00	0	91	927.3	0.5900	547.1	1.7915	1661.3	95.1	1.00	36.94	0.087	80.6751	0.015517	3.3068	0.003066	44.33307	5.541633
	03-26-2016 01	0	96	984.2	0.5780	568.9	1.7935	1765.2	101.0	1.00	39.21	0.087	85.6254	0.016469	3.3068	0.003255	47.05339	5.881673
	03-26-2016 02	0	162	1463.7	0.5150	753.8	1.8129	2653.6	150.2	1.00	58.31	0.087	127.3419	0.024492	3.3068	0.00484	69.97769	8.747211
	03-26-2016 03	0	169	1496.7	0.5050	755.8	1.8180	2721.0	153.6	1.00	59.63	0.087	130.2129	0.025044	3.3068	0.004949	71.55538	8.944422
	03-26-2016 04	0	168	1508.4	0.4950	746.7	1.8016	2717.6	154.8	1.00	60.10	0.087	131.2308	0.02524	3.3068	0.004988	72.11474	9.014343
	03-26-2016 05	0	168	1506.3	0.4840	729.0	1.7672	2661.9	154.5	1.00	60.01	0.087	131.0481	0.025205	3.3068	0.004981	72.01434	9.001793
	03-26-2016 06	0	168	1505.3	0.4840	728.6	1.7640	2655.3	154.4	1.00	59.97	0.087	130.9611	0.025188	3.3068	0.004978	71.96653	8.995817
	03-26-2016 07	0	167	1493.1	0.4710	703.3	1.7770	2653.3	153.2	1.00	59.49	0.087	129.8997	0.024984	3.3068	0.004937	71.38327	8.922908
	03-26-2016 08	0	167	1493.1	0.4710	703.3	1.7596	2627.2	153.2	1.00	59.49	0.087	129.8997	0.024984	3.3068	0.004937	71.38327	8.922908
	03-26-2016 09	0	167	1492.8	0.4740	707.6	1.7469	2607.7	153.2	1.00	59.47	0.087	129.8736	0.024979	3.3068	0.004936	71.36892	8.921116

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-26-2016 10	0	167	1469.4	0.4900	720.0	1.7530	2575.8	150.8	1.00	58.54	0.087	127.8378	0.024588	3.3068	0.004859	70.2502	8.781275
	03-26-2016 11	0	167	1474.5	0.4880	719.6	1.7331	2555.4	151.3	1.00	58.75	0.087	128.2815	0.024673	3.3068	0.004876	70.49402	8.811753
	03-26-2016 12	0	166	1476.5	0.4850	716.1	1.7288	2552.6	151.5	1.00	58.82	0.087	128.4555	0.024706	3.3068	0.004882	70.58964	8.823705
	03-26-2016 13	0	166	1468.4	0.4870	715.1	1.7236	2530.9	150.7	1.00	58.50	0.087	127.7508	0.024571	3.3068	0.004856	70.20239	8.775299
	03-26-2016 14	0	165	1454.5	0.4950	720.0	1.7286	2514.3	149.2	1.00	57.95	0.087	126.5415	0.024338	3.3068	0.00481	69.53785	8.692231
	03-26-2016 15	0	164	1459.3	0.4900	715.1	1.7231	2514.5	149.7	1.00	58.14	0.087	126.9591	0.024419	3.3068	0.004826	69.76733	8.720916
	03-26-2016 16	0	164	1461.4	0.4870	711.7	1.7140	2504.9	149.9	1.00	58.22	0.087	127.1418	0.024454	3.3068	0.004833	69.86773	8.733466
	03-26-2016 17	0	165	1483.5	0.4660	691.3	1.7104	2537.4	152.2	1.00	59.10	0.087	129.0645	0.024824	3.3068	0.004906	70.9243	8.865538
	03-26-2016 18	0	165	1470.7	0.4740	697.1	1.7048	2507.3	150.9	1.00	58.59	0.087	127.9509	0.024609	3.3068	0.004863	70.31235	8.789044
	03-26-2016 19	0	146	1311.4	0.4330	567.8	1.6924	2219.4	134.6	1.00	52.25	0.087	114.0918	0.021944	3.3068	0.004337	62.69641	7.837052
	03-26-2016 20	0	140	1302.8	0.4270	556.3	1.6670	2171.8	133.7	1.00	51.90	0.087	113.3436	0.0218	3.3068	0.004308	62.28526	7.785657
	03-26-2016 21	0	164	1461.8	0.4850	709.0	1.6640	2432.4	150.0	1.00	58.24	0.087	127.1766	0.02446	3.3068	0.004834	69.88685	8.735857
	03-26-2016 22	0	164	1456.9	0.4870	709.5	1.6620	2421.3	149.5	1.00	58.04	0.087	126.7503	0.024378	3.3068	0.004818	69.65259	8.706574
	03-26-2016 23	0	164	1452.6	0.4900	711.8	1.6636	2416.5	149.0	1.00	57.87	0.087	126.3762	0.024306	3.3068	0.004803	69.44701	8.680876
	03-27-2016 00	0	164	1458.1	0.4840	705.7	1.6683	2432.5	149.6	1.00	58.09	0.087	126.8547	0.024398	3.3068	0.004822	69.70996	8.713745
	03-27-2016 01	0	163	1444.6	0.4900	707.9	1.6810	2428.4	148.2	1.00	57.55	0.087	125.6802	0.024173	3.3068	0.004777	69.06454	8.633068
	03-27-2016 02	0	163	1441.8	0.4900	705.5	1.6766	2417.3	147.9	1.00	57.44	0.087	125.4366	0.024126	3.3068	0.004768	68.93068	8.616335
	03-27-2016 03	0	162	1442.5	0.4940	712.6	1.6673	2405.1	148.0	1.00	57.47	0.087	125.4975	0.024137	3.3068	0.00477	68.96414	8.620518
	03-27-2016 04	0	159	1438.1	0.4960	713.3	1.6542	2378.9	147.6	1.00	57.29	0.087	125.1147	0.024064	3.3068	0.004755	68.75378	8.594223
	03-27-2016 05	0	158	1435.7	0.4930	707.8	1.6249	2332.9	147.3	1.00	57.20	0.087	124.9059	0.024024	3.3068	0.004748	68.63904	8.57988
	03-27-2016 06	0	158	1435.7	0.4920	706.4	1.6306	2341.1	147.3	1.00	57.20	0.087	124.9059	0.024024	3.3068	0.004748	68.63904	8.57988
	03-27-2016 07	0	159	1433.8	0.4930	706.9	1.6343	2343.3	147.1	1.00	57.12	0.087	124.7406	0.023992	3.3068	0.004741	68.54821	8.568526
	03-27-2016 08	0	158	1418.5	0.5060	717.8	1.6369	2321.9	145.5	1.00	56.51	0.087	123.4095	0.023736	3.3068	0.004691	67.81673	8.477092
	03-27-2016 09	0	163	1452.9	0.4880	709.0	1.6482	2394.6	149.1	1.00	57.88	0.087	126.4023	0.024311	3.3068	0.004804	69.46135	8.682669
	03-27-2016 10	0	163	1449.5	0.4940	716.1	1.6494	2390.8	148.7	1.00	57.75	0.087	126.1065	0.024255	3.3068	0.004793	69.2988	8.662351
	03-27-2016 11	0	163	1462.4	0.4890	715.1	1.6370	2394.0	150.0	1.00	58.26	0.087	127.2288	0.02447	3.3068	0.004836	69.91554	8.739442
	03-27-2016 12	0	162	1449.4	0.4940	716.0	1.6491	2390.2	148.7	1.00	57.75	0.087	126.0978	0.024253	3.3068	0.004793	69.29402	8.661753
	03-27-2016 13	0	162	1450.1	0.4980	722.1	1.6457	2386.5	148.8	1.00	57.77	0.087	126.1587	0.024265	3.3068	0.004795	69.32749	8.665936
	03-27-2016 14	0	161	1448.0	0.4980	721.1	1.6512	2390.9	148.6	1.00	57.69	0.087	125.976	0.024229	3.3068	0.004788	69.22709	8.653386
	03-27-2016 15	0	161	1445.5	0.4950	715.5	1.6484	2382.8	148.3	1.00	57.59	0.087	125.7585	0.024188	3.3068	0.00478	69.10757	8.638446
	03-27-2016 16	0	161	1442.2	0.4980	718.2	1.6508	2380.8	148.0	1.00	57.46	0.087	125.4714	0.024132	3.3068	0.004769	68.9498	8.618725
	03-27-2016 17	0	161	1444.2	0.4890	706.2	1.6562	2391.9	148.2	1.00	57.54	0.087	125.6454	0.024166	3.3068	0.004776	69.04542	8.630677
	03-27-2016 18	0	161	1446.9	0.4820	697.4	1.6566	2396.9	148.5	1.00	57.65	0.087	125.8803	0.024211	3.3068	0.004785	69.1745	8.646813
	03-27-2016 19	0	161	1448.3	0.4820	698.1	1.6716	2421.0	148.6	1.00	57.70	0.087	126.0021	0.024235	3.3068	0.004789	69.24143	8.655179
	03-27-2016 20	0	161	1441.7	0.4860	700.7	1.6796	2421.5	147.9	1.00	57.44	0.087	125.4279	0.024124	3.3068	0.004767	68.9259	8.615737
	03-27-2016 21	0	154	1390.5	0.4970	691.1	1.6734	2326.8	142.7	1.00	55.40	0.087	120.9735	0.023267	3.3068	0.004598	66.47809	8.309761
	03-27-2016 22	0	122	1168.6	0.5760	673.1	1.6529	1931.6	119.9	1.00	46.56	0.087	101.6682	0.019554	3.3068	0.003864	55.86932	6.983665
	03-27-2016 23	0	100	985.8	0.5881	579.7	1.5949	1572.3	101.1	1.00	39.27	0.087	85.7646	0.016495	3.3068	0.00326	47.12988	5.891235
	03-28-2016 00	0	98	984.5	0.5950	585.8	1.6045	1579.6	101.0	1.00	39.22	0.087	85.6515	0.016474	3.3068	0.003256	47.06773	5.883466
	03-28-2016 01	0	98	975.9	0.6010	586.5	1.6151	1576.2	100.1	1.00	38.88	0.087	84.9033	0.01633	3.3068	0.003227	46.65657	5.832072
	03-28-2016 02	0	98	975.8	0.5990	584.5	1.6282	1588.8	100.1	1.00	38.88	0.087	84.8946	0.016328	3.3068	0.003227	46.65179	5.831474
	03-28-2016 03	0	98	968.2	0.6040	584.8	1.6315	1579.6	99.3	1.00	38.57	0.087	84.2334	0.016201	3.3068	0.003202	46.28845	5.786056
	03-28-2016 04	0	131	1158.4	0.5920	685.8	1.6385	1898.0	118.8	1.00	46.15	0.087	100.7808	0.019384	3.3068	0.003831	55.38167	6.922709
	03-28-2016 05	0	164	1452.8	0.5190	754.0	1.6726	2430.0	149.1	1.00	57.88	0.087	126.3936	0.02431	3.3068	0.004804	69.45657	8.682072
	03-28-2016 06	0	165	1472.8	0.5170	761.4	1.6699	2459.4	151.1	1.00	58.68	0.087	128.1336	0.024644	3.3068	0.00487	70.41275	8.801594
	03-28-2016 07	0	165	1453.5	0.5230	760.2	1.6889	2454.8	149.1	1.00	57.91	0.087	126.4545	0.024322	3.3068	0.004806	69.49004	8.686255
	03-28-2016 08	0	164	1416.3	0.5220	739.3	1.6963	2402.4	145.3	1.00	56.43	0.087	123.2181	0.023699	3.3068	0.004683	67.71155	8.463944

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-28-2016 09	0	164	1406.0	0.5230	735.3	1.6973	2386.4	144.3	1.00	56.02	0.087	122.322	0.023527	3.3068	0.004649	67.21912	8.40239
	03-28-2016 10	0	164	1402.0	0.5270	738.9	1.6995	2382.7	143.8	1.00	55.86	0.087	121.974	0.02346	3.3068	0.004636	67.02789	8.378486
	03-28-2016 11	0	165	1415.4	0.5230	740.3	1.6855	2385.7	145.2	1.00	56.39	0.087	123.1398	0.023684	3.3068	0.00468	67.66853	8.458566
	03-28-2016 12	0	164	1409.5	0.5250	740.0	1.6943	2388.1	144.6	1.00	56.16	0.087	122.6265	0.023585	3.3068	0.004661	67.38645	8.423307
	03-28-2016 13	0	164	1406.5	0.5230	735.6	1.7020	2393.8	144.3	1.00	56.04	0.087	122.3655	0.023535	3.3068	0.004651	67.24303	8.405378
	03-28-2016 14	0	163	1402.9	0.5230	733.7	1.7040	2390.6	143.9	1.00	55.89	0.087	122.0523	0.023475	3.3068	0.004639	67.07092	8.383865
	03-28-2016 15	0	163	1400.6	0.5250	735.3	1.7135	2399.9	143.7	1.00	55.80	0.087	121.8522	0.023436	3.3068	0.004631	66.96096	8.37012
	03-28-2016 16	0	163	1401.1	0.5520	773.4	1.7190	2408.5	143.8	1.00	55.82	0.087	121.8957	0.023445	3.3068	0.004633	66.98486	8.373108
	03-28-2016 17	0	164	1400.1	0.5530	774.3	1.7234	2412.9	143.7	1.00	55.78	0.087	121.8087	0.023428	3.3068	0.00463	66.93705	8.367131
	03-28-2016 18	0	163	1390.6	0.5520	767.6	1.7327	2409.5	142.7	1.00	55.40	0.087	120.9822	0.023269	3.3068	0.004598	66.48287	8.310359
	03-28-2016 19	0	162	1389.3	0.5520	766.9	1.7385	2415.3	142.5	1.00	55.35	0.087	120.8691	0.023247	3.3068	0.004594	66.42072	8.30259
	03-28-2016 20	0	161	1389.8	0.5460	758.8	1.7382	2415.8	142.6	1.00	55.37	0.087	120.9126	0.023256	3.3068	0.004596	66.44462	8.305578
	03-28-2016 21	0	160	1392.1	0.5420	754.5	1.7364	2417.2	142.8	1.00	55.46	0.087	121.1127	0.023294	3.3068	0.004603	66.55458	8.319323
	03-28-2016 22	0	159	1385.6	0.5350	741.3	1.7478	2421.8	142.2	1.00	55.20	0.087	120.5472	0.023185	3.3068	0.004582	66.24382	8.280478
	03-28-2016 23	0	144	1267.2	0.5580	707.1	1.7626	2233.6	130.0	1.00	50.49	0.087	110.2464	0.021204	3.3068	0.00419	60.58327	7.572908
	03-29-2016 00	0	140	1252.8	0.5660	709.1	1.7633	2209.0	128.5	1.00	49.91	0.087	108.9936	0.020963	3.3068	0.004143	59.89482	7.486853
	03-29-2016 01	0	140	1249.0	0.5660	706.9	1.7755	2217.6	128.1	1.00	49.76	0.087	108.663	0.0209	3.3068	0.00413	59.71315	7.464143
	03-29-2016 02	0	139	1250.4	0.5640	705.2	1.7818	2228.0	128.3	1.00	49.82	0.087	108.7848	0.020923	3.3068	0.004135	59.78008	7.47251
	03-29-2016 03	0	144	1295.6	0.5560	720.4	1.7804	2306.7	132.9	1.00	51.62	0.087	112.7172	0.021679	3.3068	0.004284	61.94104	7.742629
	03-29-2016 04	0	156	1380.3	0.5470	755.0	1.7795	2456.2	141.6	1.00	54.99	0.087	120.0861	0.023097	3.3068	0.004564	65.99044	8.248805
	03-29-2016 05	0	157	1394.8	0.5270	735.1	1.7696	2468.3	143.1	1.00	55.57	0.087	121.3476	0.023339	3.3068	0.004612	66.68367	8.335458
	03-29-2016 06	0	159	1387.3	0.5360	743.6	1.8051	2504.2	142.3	1.00	55.27	0.087	120.6951	0.023214	3.3068	0.004587	66.3251	8.290637
	03-29-2016 07	0	159	1387.7	0.5410	750.7	1.8020	2500.7	142.4	1.00	55.29	0.087	120.7299	0.02322	3.3068	0.004589	66.34422	8.293028
	03-29-2016 08	0	158	1378.3	0.5430	748.4	1.8054	2488.4	141.4	1.00	54.91	0.087	119.9121	0.023063	3.3068	0.004558	66.89482	8.236853
	03-29-2016 09	0	158	1380.6	0.5450	752.4	1.8021	2488.0	141.7	1.00	55.00	0.087	120.1122	0.023102	3.3068	0.004565	66.00478	8.250598
	03-29-2016 10	0	157	1383.5	0.5330	737.4	1.7995	2489.6	141.9	1.00	55.12	0.087	120.3645	0.02315	3.3068	0.004575	66.14343	8.267928
	03-29-2016 11	0	157	1369.6	0.5390	738.2	1.8186	2490.8	140.5	1.00	54.57	0.087	119.1552	0.022918	3.3068	0.004529	65.47888	8.184861
	03-29-2016 12	0	157	1387.2	0.5310	736.6	1.8041	2502.7	142.3	1.00	55.27	0.087	120.6864	0.023212	3.3068	0.004587	66.32032	8.29004
	03-29-2016 13	0	157	1370.2	0.5450	746.8	1.8121	2483.0	140.6	1.00	54.59	0.087	119.2074	0.022928	3.3068	0.004531	65.50757	8.188446
	03-29-2016 14	0	161	1414.9	0.5020	710.3	1.8138	2566.3	145.2	1.00	56.37	0.087	123.0963	0.023676	3.3068	0.004679	67.64462	8.455578
	03-29-2016 15	0	161	1411.4	0.5250	741.0	1.8055	2548.3	144.8	1.00	56.23	0.087	122.7918	0.023617	3.3068	0.004667	67.47729	8.434661
	03-29-2016 16	0	159	1392.9	0.5340	743.8	1.8189	2533.6	142.9	1.00	55.49	0.087	121.1823	0.023307	3.3068	0.004606	66.59283	8.324104
	03-29-2016 17	0	158	1378.8	0.5460	752.8	1.8224	2512.7	141.5	1.00	54.93	0.087	119.9556	0.023072	3.3068	0.004559	65.91873	8.239841
	03-29-2016 18	0	158	1380.4	0.5360	739.9	1.8190	2510.9	141.6	1.00	55.00	0.087	120.0948	0.023098	3.3068	0.004565	65.99522	8.249402
	03-29-2016 19	0	158	1390.3	0.5360	745.2	1.8183	2528.0	142.6	1.00	55.39	0.087	120.9561	0.023264	3.3068	0.004597	66.46853	8.308566
	03-29-2016 20	0	159	1395.0	0.5370	749.1	1.8149	2531.8	143.1	1.00	55.58	0.087	121.365	0.023343	3.3068	0.004613	66.69323	8.336553
	03-29-2016 21	0	159	1400.3	0.5430	760.4	1.8060	2529.0	143.7	1.00	55.79	0.087	121.8261	0.023431	3.3068	0.00463	66.94561	8.368327
	03-29-2016 22	0	160	1404.9	0.5460	767.1	1.8048	2535.6	144.1	1.00	55.97	0.087	122.2263	0.023508	3.3068	0.004646	67.16653	8.395817
	03-29-2016 23	0	159	1389.1	0.5580	775.1	1.8179	2525.3	142.5	1.00	55.34	0.087	120.8517	0.023244	3.3068	0.004593	66.41116	8.301394
	03-30-2016 00	0	159	1391.5	0.5580	776.5	1.8130	2522.8	142.8	1.00	55.44	0.087	121.0605	0.023284	3.3068	0.004601	66.5259	8.315737
	03-30-2016 01	0	159	1392.3	0.5560	774.1	1.8106	2520.9	142.9	1.00	55.47	0.087	121.1301	0.023297	3.3068	0.004604	66.56414	8.320518
	03-30-2016 02	0	159	1393.6	0.5560	774.8	1.8055	2516.2	143.0	1.00	55.52	0.087	121.2432	0.023319	3.3068	0.004608	66.62629	8.328287
	03-30-2016 03	0	161	1392.9	0.5520	768.9	1.8067	2516.6	142.9	1.00	55.49	0.087	121.1823	0.023307	3.3068	0.004606	66.59283	8.324104
	03-30-2016 04	0	162	1403.6	0.5540	777.6	1.8056	2534.3	144.0	1.00	55.92	0.087	122.1132	0.023487	3.3068	0.004641	67.10438	8.388048
	03-30-2016 05	0	163	1479.3	0.5410	800.3	1.7657	2612.0	151.8	1.00	58.94	0.087	128.6991	0.024753	3.3068	0.004892	70.72351	8.840438
	03-30-2016 06	0	164	1471.3	0.5430	798.9	1.7935	2638.8	151.0	1.00	58.62	0.087	128.0031	0.024619	3.3068	0.004865	70.34104	8.792629
	03-30-2016 07	0	164	1484.8	0.5380	798.8	1.7740	2634.1	152.3	1.00	59.16	0.087	129.1776	0.024845	3.3068	0.00491	70.98645	8.873307

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-30-2016 08	0	165	1472.4	0.5420	798.0	1.7900	2635.6	151.1	1.00	58.66	0.087	128.0988	0.024638	3.3068	0.004869	70.39363	8.799203
	03-30-2016 09	0	164	1467.9	0.5490	805.9	1.7794	2612.0	150.6	1.00	58.48	0.087	127.7073	0.024562	3.3068	0.004854	70.17849	8.772311
	03-30-2016 10	0	164	1463.8	0.5510	806.6	1.7829	2609.8	150.2	1.00	58.32	0.087	127.3506	0.024494	3.3068	0.00484	69.98247	8.747809
	03-30-2016 11	0	164	1480.5	0.5400	799.5	1.7697	2620.1	151.9	1.00	58.98	0.087	128.8035	0.024773	3.3068	0.004896	70.78088	8.84761
	03-30-2016 12	0	164	1474.5	0.5360	790.3	1.7656	2603.4	151.3	1.00	58.75	0.087	128.2815	0.024673	3.3068	0.004876	70.49402	8.811753
	03-30-2016 13	0	164	1459.5	0.5490	801.3	1.7770	2593.5	149.7	1.00	58.15	0.087	126.9765	0.024422	3.3068	0.004826	69.77689	8.722112
	03-30-2016 14	0	162	1455.6	0.5350	778.7	1.7694	2575.5	149.3	1.00	57.99	0.087	126.6372	0.024357	3.3068	0.004813	69.59044	8.698805
	03-30-2016 15	0	162	1450.2	0.5430	787.5	1.7620	2555.2	148.8	1.00	57.78	0.087	126.1674	0.024265	3.3068	0.004795	69.33227	8.666534
	03-30-2016 16	0	162	1446.8	0.5450	788.5	1.7604	2547.0	148.4	1.00	57.64	0.087	125.8716	0.024209	3.3068	0.004784	69.16972	8.646215
	03-30-2016 17	0	162	1441.1	0.5440	784.0	1.7608	2537.5	147.9	1.00	57.41	0.087	125.3757	0.024114	3.3068	0.004765	68.89721	8.612151
	03-30-2016 18	0	162	1445.8	0.5440	786.5	1.7578	2541.4	148.3	1.00	57.60	0.087	125.7846	0.024193	3.3068	0.004781	69.12191	8.640239
	03-30-2016 19	0	162	1445.3	0.5430	784.8	1.7567	2538.9	148.3	1.00	57.58	0.087	125.7411	0.024184	3.3068	0.004779	69.09801	8.637251
	03-30-2016 20	0	161	1442.0	0.5440	784.4	1.7530	2527.8	148.0	1.00	57.45	0.087	125.454	0.024129	3.3068	0.004768	68.94024	8.61753
	03-30-2016 21	0	161	1441.3	0.5420	781.2	1.7543	2528.5	147.9	1.00	57.42	0.087	125.3931	0.024117	3.3068	0.004766	68.90677	8.613347
	03-30-2016 22	0	124	1134.0	0.5360	607.8	1.7380	1970.9	116.4	1.00	45.18	0.087	98.658	0.018975	3.3068	0.00375	54.21514	6.776892
	03-30-2016 23	0	98	975.0	0.5261	512.9	1.7110	1668.2	100.0	1.00	38.84	0.087	84.825	0.016315	3.3068	0.003224	46.61355	5.826693
	03-31-2016 00	0	98	976.5	0.5380	525.4	1.6901	1650.4	100.2	1.00	38.90	0.087	84.9555	0.01634	3.3068	0.003229	46.68526	5.835657
	03-31-2016 01	0	98	948.0	0.5690	539.4	1.6951	1607.0	97.3	1.00	37.77	0.087	82.476	0.015863	3.3068	0.003135	45.32271	5.665339
	03-31-2016 02	0	98	952.9	0.5720	545.1	1.6761	1597.2	97.8	1.00	37.96	0.087	82.9023	0.015945	3.3068	0.003151	45.55697	5.694622
	03-31-2016 03	0	98	949.6	0.5660	537.5	1.6725	1588.2	97.4	1.00	37.83	0.087	82.6152	0.01589	3.3068	0.00314	45.3992	5.6749
	03-31-2016 04	0	116	1074.9	0.5810	624.5	1.7066	1834.4	110.3	1.00	42.82	0.087	93.5163	0.017986	3.3068	0.003554	51.38964	6.423705
	03-31-2016 05	0	121	1131.7	0.5670	641.7	1.6943	1917.4	116.1	1.00	45.09	0.087	98.4579	0.018937	3.3068	0.003742	54.10518	6.763147
	03-31-2016 06	0	157	1394.3	0.5020	699.9	1.7182	2395.7	143.1	1.00	55.55	0.087	121.3041	0.023331	3.3068	0.004611	66.65976	8.33247
	03-31-2016 07	0	160	1414.7	0.4880	690.4	1.7172	2429.3	145.1	1.00	56.36	0.087	123.0789	0.023672	3.3068	0.004678	67.63506	8.454382
	03-31-2016 08	0	160	1414.5	0.4830	683.2	1.7191	2431.6	145.1	1.00	56.35	0.087	123.0615	0.023669	3.3068	0.004677	67.6255	8.453187
	03-31-2016 09	0	160	1413.8	0.4810	680.0	1.7140	2423.3	145.1	1.00	56.33	0.087	123.0006	0.023657	3.3068	0.004675	67.59203	8.449004
	03-31-2016 10	0	163	1430.2	0.4720	675.1	1.7272	2470.2	146.7	1.00	56.98	0.087	124.4274	0.023932	3.3068	0.004729	68.3761	8.547012
	03-31-2016 11	0	165	1441.7	0.4820	694.9	1.7288	2492.4	147.9	1.00	57.44	0.087	125.4279	0.024124	3.3068	0.004767	68.9259	8.615737
	03-31-2016 12	0	165	1434.3	0.4840	694.2	1.7460	2504.3	147.2	1.00	57.14	0.087	124.7841	0.024	3.3068	0.004743	68.57211	8.571514
	03-31-2016 13	0	166	1433.8	0.4870	698.3	1.7529	2513.3	147.1	1.00	57.12	0.087	124.7406	0.023992	3.3068	0.004741	68.54821	8.568526
	03-31-2016 14	0	166	1441.7	0.4830	696.3	1.7467	2518.2	147.9	1.00	57.44	0.087	125.4279	0.024124	3.3068	0.004767	68.9259	8.615737
	03-31-2016 15	0	165	1432.6	0.4870	697.7	1.7573	2517.5	147.0	1.00	57.08	0.087	124.6362	0.023972	3.3068	0.004737	68.49084	8.561355
	03-31-2016 16	0	165	1433.7	0.4880	699.6	1.7537	2514.3	147.1	1.00	57.12	0.087	124.7319	0.02399	3.3068	0.004741	68.54343	8.567928
	03-31-2016 17	0	164	1439.6	0.4930	709.7	1.7456	2512.9	147.7	1.00	57.35	0.087	125.2452	0.024089	3.3068	0.00476	68.8255	8.603187
	03-31-2016 18	0	164	1435.3	0.4890	701.9	1.7504	2512.4	147.3	1.00	57.18	0.087	124.8711	0.024017	3.3068	0.004746	68.61992	8.57749
	03-31-2016 19	0	164	1436.4	0.4870	699.5	1.7482	2511.1	147.4	1.00	57.23	0.087	124.9668	0.024035	3.3068	0.00475	68.67251	8.584064
	03-31-2016 20	0	164	1435.8	0.4890	702.1	1.7472	2508.6	147.3	1.00	57.20	0.087	124.9146	0.024025	3.3068	0.004748	68.64382	8.580478
	03-31-2016 21	0	139	1241.2	0.5560	690.1	1.7369	2155.9	127.4	1.00	49.45	0.087	107.9844	0.020769	3.3068	0.004104	59.34024	7.41753
	03-31-2016 22	0	114	1054.3	0.6100	643.1	1.7265	1820.2	108.2	1.00	42.00	0.087	91.7241	0.017642	3.3068	0.003486	50.40478	6.300598
	03-31-2016 23	0	98	987.9	0.6040	596.7	1.7130	1692.3	101.4	1.00	39.36	0.087	85.9473	0.016531	3.3068	0.003267	47.23028	5.903785
	04-01-2016 00	0	99	973.9	0.6100	594.1	1.7095	1664.9	99.9	1.00	38.80	0.087	84.7293	0.016296	3.3068	0.00322	46.56096	5.82012
	04-01-2016 01	0	98	953.8	0.6480	618.1	1.7058	1627.0	97.9	1.00	38.00	0.087	82.9806	0.01596	3.3068	0.003154	45.6	5.7
	04-01-2016 02	0	98	961.3	0.6650	639.3	1.6862	1620.9	98.6	1.00	38.30	0.087	83.6331	0.016085	3.3068	0.003179	45.95857	5.744821
	04-01-2016 03	0	98	954.6	0.6680	637.7	1.6827	1606.3	97.9	1.00	38.03	0.087	83.0502	0.015973	3.3068	0.003157	45.63825	5.704781
	04-01-2016 04	0	137	1214.0	0.6050	734.5	1.7027	2067.1	124.6	1.00	48.37	0.087	105.618	0.020314	3.3068	0.004014	58.03984	7.25498
	04-01-2016 05	0	165	1458.7	0.5320	776.0	1.6961	2474.1	149.7	1.00	58.12	0.087	126.9069	0.024409	3.3068	0.004824	69.73865	8.717331
	04-01-2016 06	0	165	1445.0	0.5250	758.6	1.7274	2496.1	148.3	1.00	57.57	0.087	125.715	0.024179	3.3068	0.004778	69.08367	8.635458

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-01-2016 07	0	164	1447.9	0.5150	745.7	1.7186	2488.4	148.6	1.00	57.69	0.087	125.9673	0.024228	3.3068	0.004788	69.22231	8.652789
	04-01-2016 08	0	163	1440.9	0.5180	746.4	1.7170	2474.0	147.8	1.00	57.41	0.087	125.3583	0.024111	3.3068	0.004765	68.88765	8.610956
	04-01-2016 09	0	163	1424.5	0.5270	750.7	1.7367	2473.9	146.2	1.00	56.75	0.087	123.9315	0.023836	3.3068	0.00471	68.10359	8.512948
	04-01-2016 10	0	164	1432.0	0.5290	757.5	1.7337	2482.7	146.9	1.00	57.05	0.087	124.584	0.023962	3.3068	0.004735	68.46215	8.557769
	04-01-2016 11	0	164	1425.2	0.5290	753.9	1.7245	2457.7	146.2	1.00	56.78	0.087	123.9924	0.023848	3.3068	0.004713	68.13705	8.517131
	04-01-2016 12	0	164	1434.4	0.5310	761.7	1.7175	2463.6	147.2	1.00	57.15	0.087	124.7928	0.024002	3.3068	0.004743	68.57689	8.572112
	04-01-2016 13	0	165	1443.3	0.5340	770.7	1.7139	2473.6	148.1	1.00	57.50	0.087	125.5671	0.024151	3.3068	0.004773	69.00239	8.625299
	04-01-2016 14	0	165	1436.4	0.5430	780.0	1.7149	2463.3	147.4	1.00	57.23	0.087	124.9668	0.024035	3.3068	0.00475	68.67251	8.584064
	04-01-2016 15	0	165	1439.4	0.5470	787.4	1.7246	2482.4	147.7	1.00	57.35	0.087	125.2278	0.024086	3.3068	0.00476	68.81594	8.601992
	04-01-2016 16	0	166	1447.9	0.5480	793.4	1.7190	2489.0	148.6	1.00	57.69	0.087	125.9673	0.024228	3.3068	0.004788	69.22231	8.652789
	04-01-2016 17	0	166	1451.6	0.5470	794.0	1.7136	2487.4	148.9	1.00	57.83	0.087	126.2892	0.02429	3.3068	0.0048	69.3992	8.6749
	04-01-2016 18	0	166	1447.5	0.5470	791.8	1.7110	2476.7	148.5	1.00	57.67	0.087	125.9325	0.024221	3.3068	0.004787	69.20319	8.650398
	04-01-2016 19	0	165	1454.5	0.5500	800.0	1.7134	2492.1	149.2	1.00	57.95	0.087	126.5415	0.024338	3.3068	0.00481	69.53785	8.692231
	04-01-2016 20	0	162	1435.1	0.5640	809.4	1.7114	2456.1	147.2	1.00	57.18	0.087	124.8537	0.024014	3.3068	0.004746	68.61036	8.576295
	04-01-2016 21	0	164	1446.3	0.5420	783.9	1.7321	2505.1	148.4	1.00	57.62	0.087	125.8281	0.024201	3.3068	0.004783	69.14582	8.643227
	04-01-2016 22	0	165	1453.5	0.5340	776.2	1.7324	2518.0	149.1	1.00	57.91	0.087	126.4545	0.024322	3.3068	0.004806	69.49004	8.686255
	04-01-2016 23	0	130	1180.7	0.5610	662.4	1.7274	2039.5	121.1	1.00	47.04	0.087	102.7209	0.019757	3.3068	0.003904	58.44594	7.055976
	04-02-2016 00	0	106	1026.2	0.5500	564.4	1.7058	1750.5	105.3	1.00	40.88	0.087	89.2794	0.017171	3.3068	0.003393	49.06135	6.132669
	04-02-2016 01	0	99	965.6	0.5830	562.9	1.7058	1647.1	99.1	1.00	38.47	0.087	84.0072	0.016157	3.3068	0.003193	46.16414	5.770518
	04-02-2016 02	0	99	969.9	0.5950	577.1	1.6921	1641.2	99.5	1.00	38.64	0.087	84.3813	0.016229	3.3068	0.003207	46.36972	5.796215
	04-02-2016 03	0	102	996.6	0.5890	587.0	1.6937	1687.9	102.2	1.00	39.71	0.087	86.7042	0.016676	3.3068	0.003296	47.64622	5.955777
	04-02-2016 04	0	101	970.1	0.6050	586.9	1.7075	1656.4	99.5	1.00	38.65	0.087	84.3987	0.016233	3.3068	0.003208	46.37928	5.79741
	04-02-2016 05	0	100	964.7	0.6240	602.0	1.6859	1626.4	99.0	1.00	38.43	0.087	83.9289	0.016142	3.3068	0.00319	46.12112	5.765139
	04-02-2016 06	0	105	1014.6	0.6030	611.8	1.6964	1721.2	104.1	1.00	40.42	0.087	88.2702	0.016977	3.3068	0.003355	48.50677	6.063347
	04-02-2016 07	0	124	1153.6	0.5800	669.1	1.7101	1972.8	118.4	1.00	45.96	0.087	100.3632	0.019303	3.3068	0.003815	55.15219	6.894024
	04-02-2016 08	0	152	1368.5	0.5620	769.1	1.7233	2358.4	140.4	1.00	54.52	0.087	119.0595	0.022899	3.3068	0.004525	65.42629	8.178287
	04-02-2016 09	0	160	1420.8	0.5530	785.7	1.7382	2469.6	145.8	1.00	56.61	0.087	123.6096	0.023774	3.3068	0.004698	67.92669	8.490837
	04-02-2016 10	0	160	1426.2	0.5390	768.7	1.7364	2476.5	146.3	1.00	56.82	0.087	124.0794	0.023865	3.3068	0.004716	68.18486	8.523108
	04-02-2016 11	0	151	1357.1	0.5350	725.0	1.7293	2346.9	139.2	1.00	54.07	0.087	118.0677	0.022708	3.3068	0.004488	64.88127	8.110159
	04-02-2016 12	0	143	1314.0	0.5510	724.0	1.7361	2281.3	134.8	1.00	52.35	0.087	114.318	0.021987	3.3068	0.004345	62.82072	7.85259
	04-02-2016 13	0	157	1391.5	0.5540	770.9	1.7436	2426.2	142.8	1.00	55.44	0.087	121.0605	0.023284	3.3068	0.004601	66.52559	8.315737
	04-02-2016 14	0	159	1412.1	0.5440	768.2	1.7441	2462.9	144.9	1.00	56.26	0.087	122.8527	0.023629	3.3068	0.004669	67.51076	8.438845
	04-02-2016 15	0	140	1265.5	0.5450	689.7	1.7424	2205.0	129.8	1.00	50.42	0.087	110.0985	0.021176	3.3068	0.004185	60.50199	7.562749
	04-02-2016 16	0	158	1405.0	0.5400	758.7	1.7549	2465.6	144.2	1.00	55.98	0.087	122.235	0.02351	3.3068	0.004646	67.17131	8.396414
	04-02-2016 17	0	140	1283.1	0.5440	698.0	1.7522	2248.3	131.6	1.00	51.12	0.087	111.5297	0.02147	3.3068	0.004243	61.34343	7.667928
	04-02-2016 18	0	162	1431.6	0.5400	773.1	1.7656	2527.6	146.9	1.00	57.04	0.087	124.5492	0.023955	3.3068	0.004734	68.44303	8.555378
	04-02-2016 19	0	165	1455.4	0.5370	781.5	1.7676	2572.6	149.3	1.00	57.98	0.087	126.6198	0.024353	3.3068	0.004813	69.58088	8.69761
	04-02-2016 20	0	164	1462.5	0.5330	779.5	1.7629	2578.2	150.0	1.00	58.27	0.087	127.2375	0.024472	3.3068	0.004836	69.92032	8.74004
	04-02-2016 21	0	163	1456.8	0.5300	772.1	1.7619	2566.8	149.5	1.00	58.04	0.087	126.7416	0.024377	3.3068	0.004817	69.64781	8.705976
	04-02-2016 22	0	162	1435.9	0.5410	776.8	1.7768	2551.3	147.3	1.00	57.21	0.087	124.9233	0.024027	3.3068	0.004748	68.64861	8.581076
	04-02-2016 23	0	158	1408.6	0.5430	764.9	1.7742	2499.1	144.5	1.00	56.12	0.087	122.5482	0.02357	3.3068	0.004658	67.34343	8.417928
	04-03-2016 00	0	131	1207.0	0.5070	611.9	1.7749	2142.3	123.8	1.00	48.09	0.087	105.009	0.020197	3.3068	0.003991	57.70518	7.213147
	04-03-2016 01	0	135	1258.6	0.5380	677.1	1.7620	2217.6	129.1	1.00	50.14	0.087	109.4982	0.02106	3.3068	0.004162	60.17211	7.521514
	04-03-2016 02	0	132	1228.8	0.5430	667.2	1.7720	2177.4	126.1	1.00	48.96	0.087	106.9056	0.020562	3.3068	0.004063	58.74741	7.343426
	04-03-2016 03	0	148	1361.3	0.5560	756.9	1.7643	2401.7	139.7	1.00	54.24	0.087	118.4331	0.022779	3.3068	0.004502	65.08207	8.135259
	04-03-2016 04	0	156	1402.6	0.5480	768.6	1.7696	2482.1	143.9	1.00	55.88	0.087	122.0262	0.02347	3.3068	0.004638	67.05657	8.382072
	04-03-2016 05	0	162	1449.5	0.5130	743.6	1.7736	2570.9	148.7	1.00	57.75	0.087	126.1065	0.024255	3.3068	0.004793	69.2988	8.662351

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-03-2016 06	0	162	1452.8	0.5090	739.5	1.7797	2585.5	149.1	1.00	57.88	0.087	126.3936	0.02431	3.3068	0.004804	69.45657	8.682072
	04-03-2016 07	0	163	1458.4	0.5020	732.1	1.7877	2607.2	149.6	1.00	58.10	0.087	126.8808	0.024404	3.3068	0.004823	69.7243	8.715538
	04-03-2016 08	0	162	1442.7	0.4870	702.6	1.8013	2598.7	148.0	1.00	57.48	0.087	125.5149	0.024141	3.3068	0.004771	68.97371	8.621713
	04-03-2016 09	0	163	1457.7	0.4870	709.9	1.7952	2616.8	149.6	1.00	58.08	0.087	126.8199	0.024392	3.3068	0.00482	69.69084	8.711355
	04-03-2016 10	0	163	1465.0	0.4770	698.8	1.7888	2620.6	150.3	1.00	58.37	0.087	127.455	0.024514	3.3068	0.004844	70.03984	8.75498
	04-03-2016 11	0	163	1463.4	0.4830	706.8	1.7769	2600.3	150.1	1.00	58.30	0.087	127.3158	0.024487	3.3068	0.004839	69.96335	8.745418
	04-03-2016 12	0	143	1316.8	0.4970	654.4	1.7684	2328.6	135.1	1.00	52.46	0.087	114.5616	0.022034	3.3068	0.004354	62.95458	7.869323
	04-03-2016 13	0	128	1189.3	0.5630	669.6	1.7647	2098.8	122.0	1.00	47.38	0.087	103.4691	0.019901	3.3068	0.003933	56.85896	7.107371
	04-03-2016 14	0	111	1064.4	0.6130	652.5	1.7376	1849.5	109.2	1.00	42.41	0.087	92.6028	0.017811	3.3068	0.00352	50.88765	6.360956
	04-03-2016 15	0	106	1028.6	0.6650	684.0	1.7284	1777.8	105.5	1.00	40.98	0.087	89.4882	0.017212	3.3068	0.003401	49.1761	6.147012
	04-03-2016 16	0	109	1054.3	0.6510	686.3	1.7300	1823.9	108.2	1.00	42.00	0.087	91.7241	0.017642	3.3068	0.003486	50.40478	6.300598
	04-03-2016 17	0	143	1310.5	0.5910	774.5	1.7571	2302.7	134.5	1.00	52.21	0.087	114.0135	0.021929	3.3068	0.004334	62.65339	7.831673
	04-03-2016 18	0	148	1332.7	0.5530	737.0	1.7590	2344.2	136.7	1.00	53.10	0.087	115.9449	0.0223	3.3068	0.004407	63.71474	7.964343
	04-03-2016 19	0	160	1441.2	0.5400	778.2	1.7691	2549.6	147.9	1.00	57.42	0.087	125.3844	0.024116	3.3068	0.004766	68.90199	8.612749
	04-03-2016 20	0	161	1444.2	0.5210	752.4	1.7800	2570.7	148.2	1.00	57.54	0.087	125.6454	0.024166	3.3068	0.004776	69.04542	8.630677
	04-03-2016 21	0	136	1261.9	0.5260	663.8	1.7704	2234.1	129.5	1.00	50.27	0.087	109.7853	0.021115	3.3068	0.004173	60.32988	7.541235
	04-03-2016 22	0	116	1093.0	0.5530	604.4	1.7574	1920.8	112.1	1.00	43.55	0.087	95.091	0.018289	3.3068	0.003614	52.25498	6.531873
	04-03-2016 23	0	99	1002.5	0.5970	598.5	1.7408	1745.2	102.9	1.00	39.94	0.087	87.2175	0.016775	3.3068	0.003315	47.92829	5.991036
	04-04-2016 00	0	100	988.5	0.5950	588.2	1.7574	1737.2	101.4	1.00	39.38	0.087	85.9995	0.016541	3.3068	0.003269	47.25896	5.907371
	04-04-2016 01	0	104	1035.1	0.6050	626.2	1.7415	1802.6	106.2	1.00	41.24	0.087	90.0537	0.01732	3.3068	0.003423	49.48685	6.185857
	04-04-2016 02	0	99	965.7	0.6580	635.4	1.7540	1693.8	99.1	1.00	38.47	0.087	84.0159	0.016159	3.3068	0.003193	46.16892	5.771116
	04-04-2016 03	0	109	1056.0	0.6560	692.7	1.7366	1833.8	108.3	1.00	42.07	0.087	91.872	0.01767	3.3068	0.003492	50.48606	6.310757
	04-04-2016 04	0	158	1395.5	0.5480	764.7	1.7668	2465.5	143.2	1.00	55.60	0.087	121.4085	0.023351	3.3068	0.004615	66.71713	8.339641
	04-04-2016 05	0	160	1428.7	0.5200	742.9	1.7534	2505.1	146.6	1.00	56.92	0.087	124.2969	0.023907	3.3068	0.004724	68.30438	8.538048
	04-04-2016 06	0	160	1424.5	0.5260	749.3	1.7728	2525.3	146.2	1.00	56.75	0.087	123.9315	0.023836	3.3068	0.00471	68.10359	8.512948
	04-04-2016 07	0	160	1413.6	0.5330	753.4	1.7792	2515.1	145.0	1.00	56.32	0.087	122.9832	0.023654	3.3068	0.004674	67.58247	8.447809
	04-04-2016 08	0	160	1410.5	0.5340	753.2	1.7721	2499.5	144.7	1.00	56.20	0.087	122.7135	0.023602	3.3068	0.004664	67.43426	8.429283
	04-04-2016 09	0	160	1414.8	0.5210	737.1	1.7652	2497.4	145.2	1.00	56.37	0.087	123.0876	0.023674	3.3068	0.004678	67.63984	8.45498
	04-04-2016 10	0	151	1333.2	0.5220	695.9	1.7677	2356.7	136.8	1.00	53.12	0.087	115.9884	0.022309	3.3068	0.004409	63.73865	7.967331
	04-04-2016 11	0	113	1065.0	0.4580	487.8	1.7614	1875.9	109.3	1.00	42.43	0.087	92.655	0.017821	3.3068	0.003522	50.91633	6.364542
	04-04-2016 12	0	113	1046.6	0.4800	502.4	1.7703	1852.8	107.4	1.00	41.70	0.087	91.0542	0.017513	3.3068	0.003461	50.03665	6.254582
	04-04-2016 13	0	113	1050.1	0.4950	519.8	1.7508	1838.5	107.7	1.00	41.84	0.087	91.3587	0.017571	3.3068	0.003472	50.20398	6.275498
	04-04-2016 14	0	112	1045.2	0.5070	529.9	1.7585	1838.0	107.2	1.00	41.64	0.087	90.9324	0.017489	3.3068	0.003456	49.96972	6.246215
	04-04-2016 15	0	113	1044.2	0.5050	527.3	1.7515	1828.9	107.1	1.00	41.60	0.087	90.8454	0.017473	3.3068	0.003453	49.92191	6.240239
	04-04-2016 16	0	113	1048.1	0.5500	576.5	1.7602	1844.9	107.5	1.00	41.76	0.087	91.1847	0.017538	3.3068	0.003466	50.10837	6.263546
	04-04-2016 17	0	113	1049.9	0.5620	590.0	1.7460	1833.1	107.7	1.00	41.83	0.087	91.3413	0.017568	3.3068	0.003472	50.19442	6.274303
	04-04-2016 18	0	111	1028.4	0.4950	509.1	1.7599	1809.9	105.5	1.00	40.97	0.087	89.4708	0.017208	3.3068	0.003401	49.16653	6.145817
	04-04-2016 19	0	112	1047.7	0.4870	510.2	1.7651	1849.3	107.5	1.00	41.74	0.087	91.1499	0.017531	3.3068	0.003465	50.08924	6.261155
	04-04-2016 20	0	112	1050.1	0.5160	541.9	1.7444	1831.8	107.7	1.00	41.84	0.087	91.3587	0.017571	3.3068	0.003472	50.20398	6.275498
	04-04-2016 21	0	111	1055.5	0.4750	501.4	1.7535	1850.8	108.3	1.00	42.05	0.087	91.8285	0.017662	3.3068	0.00349	50.46215	6.307769
	04-04-2016 22	0	126	1150.9	0.5300	610.0	1.7574	2022.6	118.1	1.00	45.85	0.087	100.1283	0.019258	3.3068	0.003806	55.02311	6.877888
	04-04-2016 23	0	154	1368.4	0.4700	643.1	1.7720	2424.8	140.4	1.00	54.52	0.087	119.0508	0.022898	3.3068	0.004525	65.42151	8.177689
	04-05-2016 00	0	146	1311.9	0.4770	625.8	1.7729	2325.9	134.6	1.00	52.27	0.087	114.1353	0.021952	3.3068	0.004338	62.72032	7.84004
	04-05-2016 01	0	158	1396.0	0.4680	653.3	1.7646	2463.4	143.2	1.00	55.62	0.087	121.452	0.023359	3.3068	0.004616	66.74104	8.342629
	04-05-2016 02	0	159	1403.0	0.4590	644.0	1.7793	2496.3	143.9	1.00	55.90	0.087	122.061	0.023476	3.3068	0.004639	67.0757	8.384462
	04-05-2016 03	0	153	1372.3	0.4640	636.7	1.7736	2433.9	140.8	1.00	54.67	0.087	119.3901	0.022963	3.3068	0.004538	65.60797	8.200996
	04-05-2016 04	0	158	1424.0	0.4630	659.3	1.7670	2516.2	146.1	1.00	56.73	0.087	123.888	0.023828	3.3068	0.004709	68.07968	8.50996

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/mmBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-05-2016 05	0	159	1417.7	0.5010	710.3	1.7550	2488.1	145.5	1.00	56.48	0.087	123.3399	0.023722	3.3068	0.004688	67.77849	8.472311
	04-05-2016 06	0	158	1408.0	0.5060	712.4	1.7702	2492.4	144.5	1.00	56.10	0.087	122.496	0.02356	3.3068	0.004656	67.31474	8.414343
	04-05-2016 07	0	157	1404.9	0.5100	716.5	1.7705	2487.4	144.1	1.00	55.97	0.087	122.2263	0.023508	3.3068	0.004646	67.16653	8.395817
	04-05-2016 08	0	157	1404.7	0.5210	731.8	1.7782	2497.8	144.1	1.00	55.96	0.087	122.2089	0.023505	3.3068	0.004645	67.15697	8.394622
	04-05-2016 09	0	157	1401.3	0.5200	728.7	1.7862	2503.0	143.8	1.00	55.83	0.087	121.9131	0.023448	3.3068	0.004634	66.99442	8.374303
	04-05-2016 10	0	157	1412.2	0.5210	735.8	1.7842	2519.6	144.9	1.00	56.26	0.087	122.8614	0.02363	3.3068	0.00467	67.51554	8.439442
	04-05-2016 11	0	157	1413.1	0.5250	741.9	1.7869	2525.0	145.0	1.00	56.30	0.087	122.9397	0.023645	3.3068	0.004673	67.55857	8.444821
	04-05-2016 12	0	157	1397.9	0.5300	740.9	1.8033	2520.8	143.4	1.00	55.69	0.087	121.6173	0.023391	3.3068	0.004623	66.83187	8.353984
	04-05-2016 13	0	158	1410.5	0.5220	736.3	1.8001	2539.0	144.7	1.00	56.20	0.087	122.7135	0.023602	3.3068	0.004664	67.43426	8.429283
	04-05-2016 14	0	153	1373.2	0.5340	733.3	1.8047	2478.2	140.9	1.00	54.71	0.087	119.4684	0.022978	3.3068	0.004541	65.651	8.206375
	04-05-2016 15	0	150	1353.6	0.5320	720.1	1.8002	2436.7	138.9	1.00	53.93	0.087	117.7632	0.02265	3.3068	0.004476	64.71394	8.089243
	04-05-2016 16	0	157	1422.5	0.5130	729.7	1.8086	2572.8	146.0	1.00	56.67	0.087	123.7575	0.023803	3.3068	0.004704	68.00797	8.500996
	04-05-2016 17	0	162	1446.2	0.4970	718.8	1.8335	2651.6	148.4	1.00	57.62	0.087	125.8194	0.024199	3.3068	0.004782	69.14104	8.642629
	04-05-2016 18	0	162	1450.9	0.4920	713.8	1.8316	2657.4	148.9	1.00	57.80	0.087	126.2283	0.024278	3.3068	0.004798	69.36574	8.670717
	04-05-2016 19	0	161	1455.0	0.4900	713.0	1.8305	2663.4	149.3	1.00	57.97	0.087	126.585	0.024347	3.3068	0.004811	69.56175	8.695219
	04-05-2016 20	0	161	1451.5	0.4880	708.3	1.8386	2668.8	148.9	1.00	57.83	0.087	126.2805	0.024288	3.3068	0.0048	69.39442	8.674303
	04-05-2016 21	0	162	1446.9	0.4900	709.0	1.8455	2670.2	148.5	1.00	57.65	0.087	125.8803	0.024211	3.3068	0.004785	69.1745	8.646813
	04-05-2016 22	0	162	1437.1	0.4880	701.3	1.8587	2671.1	147.4	1.00	57.25	0.087	125.0277	0.024047	3.3068	0.004752	68.70598	8.588247
	04-05-2016 23	0	154	1378.1	0.4910	676.6	1.8580	2560.5	141.4	1.00	54.90	0.087	119.8947	0.02306	3.3068	0.004557	65.88526	8.235657
	04-06-2016 00	0	150	1346.1	0.4790	644.8	1.8699	2517.1	138.1	1.00	53.63	0.087	117.1107	0.022524	3.3068	0.004451	64.35538	8.044422
	04-06-2016 01	0	149	1360.1	0.4720	642.0	1.8570	2525.7	139.5	1.00	54.19	0.087	118.3287	0.022759	3.3068	0.004498	65.0247	8.128088
	04-06-2016 02	0	148	1344.7	0.4820	648.1	1.8769	2523.9	138.0	1.00	53.57	0.087	116.9889	0.022501	3.3068	0.004447	64.28845	8.036056
	04-06-2016 03	0	148	1355.9	0.4760	645.4	1.8636	2526.8	139.1	1.00	54.02	0.087	117.9633	0.022688	3.3068	0.004484	64.8239	8.102988
	04-06-2016 04	0	148	1341.1	0.4850	650.4	1.8779	2518.4	137.6	1.00	53.43	0.087	116.6757	0.022441	3.3068	0.004435	64.11633	8.014542
	04-06-2016 05	0	145	1314.2	0.4800	630.8	1.8264	2400.3	134.8	1.00	52.36	0.087	114.3354	0.021991	3.3068	0.004346	62.83028	7.853785
	04-06-2016 06	0	134	1237.4	0.5080	628.6	1.8227	2255.4	127.0	1.00	49.30	0.087	107.6538	0.020705	3.3068	0.004092	59.15857	7.394821
	04-06-2016 07	0	132	1230.2	0.5400	664.3	1.8032	2218.3	126.2	1.00	49.01	0.087	107.0274	0.020585	3.3068	0.004068	58.81434	7.351793
	04-06-2016 08	0	129	1196.9	0.5490	657.1	1.7900	2142.4	122.8	1.00	47.69	0.087	104.1303	0.020028	3.3068	0.003958	57.22231	7.152789
	04-06-2016 09	0	133	1212.3	0.4890	592.8	1.7381	2107.1	124.4	1.00	48.30	0.087	105.4701	0.020285	3.3068	0.004009	57.95857	7.244821
	04-06-2016 10	0	131	1204.6	0.5040	607.1	1.7094	2059.1	123.6	1.00	47.99	0.087	104.8002	0.020157	3.3068	0.003983	57.59044	7.198805
	04-06-2016 11	0	130	1203.4	0.5160	621.0	1.7033	2049.7	123.5	1.00	47.94	0.087	104.6958	0.020137	3.3068	0.003979	57.53307	7.191633
	04-06-2016 12	0	133	1232.1	0.5150	634.5	1.7025	2097.6	126.4	1.00	49.09	0.087	107.1927	0.020617	3.3068	0.004074	58.90518	7.363147
	04-06-2016 13	0	133	1227.1	0.5160	633.2	1.6891	2072.7	125.9	1.00	48.89	0.087	106.7577	0.020533	3.3068	0.004058	58.66614	7.333267
	04-06-2016 14	0	133	1218.3	0.5160	628.6	1.7020	2073.6	125.0	1.00	48.54	0.087	105.9921	0.020386	3.3068	0.004029	58.24542	7.280677
	04-06-2016 15	0	136	1248.3	0.5130	640.4	1.7093	2133.7	128.1	1.00	49.73	0.087	108.6021	0.020888	3.3068	0.004128	59.67968	7.45996
	04-06-2016 16	0	133	1211.3	0.5240	634.7	1.7083	2069.3	124.3	1.00	48.26	0.087	105.3831	0.020269	3.3068	0.004005	57.91076	7.238845
	04-06-2016 17	0	129	1199.1	0.5410	648.7	1.7137	2054.9	123.0	1.00	47.77	0.087	104.3217	0.020065	3.3068	0.003965	57.32749	7.165936
	04-06-2016 18	0	129	1185.2	0.5700	675.6	1.7135	2030.8	121.6	1.00	47.22	0.087	103.1124	0.019832	3.3068	0.003919	56.66295	7.082869
	04-06-2016 19	0	129	1189.5	0.5720	680.4	1.7268	2054.0	122.0	1.00	47.39	0.087	103.4865	0.019904	3.3068	0.003933	56.86853	7.108566
	04-06-2016 20	0	129	1186.8	0.5700	676.5	1.7430	2068.6	121.8	1.00	47.28	0.087	103.2516	0.019859	3.3068	0.003924	56.73944	7.09243
	04-06-2016 21	0	130	1186.0	0.5750	682.0	1.7478	2072.9	121.7	1.00	47.25	0.087	103.182	0.019845	3.3068	0.003922	56.7012	7.087649
	04-06-2016 22	0	132	1203.7	0.5630	677.7	1.7528	2109.8	123.5	1.00	47.96	0.087	104.7219	0.020142	3.3068	0.00398	57.54741	7.193426
	04-06-2016 23	0	133	1212.5	0.5620	681.4	1.7692	2145.1	124.4	1.00	48.31	0.087	105.4875	0.020289	3.3068	0.004009	57.96813	7.246016
	04-07-2016 00	0	136	1234.6	0.5620	693.8	1.7873	2206.6	126.7	1.00	49.19	0.087	107.4102	0.020659	3.3068	0.004083	59.0247	7.378088
	04-07-2016 01	0	138	1255.9	0.5450	684.5	1.7871	2244.4	128.9	1.00	50.04	0.087	109.2633	0.021015	3.3068	0.004153	60.04303	7.505378
	04-07-2016 02	0	140	1265.0	0.5310	671.7	1.7989	2275.6	129.8	1.00	50.40	0.087	110.055	0.021167	3.3068	0.004183	60.47809	7.559761
	04-07-2016 03	0	140	1274.7	0.5180	660.3	1.7843	2274.5	130.8	1.00	50.78	0.087	110.8989	0.02133	3.3068	0.004215	60.94183	7.617729

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-07-2016 04	0	116	1085.6	0.3830	415.8	1.7821	1934.6	111.4	1.00	43.25	0.087	94.4472	0.018165	3.3068	0.00359	51.9012	6.487649
	04-07-2016 05	0	109	1051.0	0.4260	447.7	1.7330	1821.4	107.8	1.00	41.87	0.087	91.437	0.017586	3.3068	0.003475	50.24701	6.280876
	04-07-2016 06	0	110	1046.5	0.4310	451.0	1.7409	1821.8	107.4	1.00	41.69	0.087	91.0455	0.017511	3.3068	0.003461	50.03187	6.253984
	04-07-2016 07	0	111	1049.2	0.4450	466.9	1.7311	1816.3	107.6	1.00	41.80	0.087	91.2804	0.017556	3.3068	0.003469	50.16096	6.27012
	04-07-2016 08	0	86	826.0	0.4040	333.7	1.6700	1379.4	84.8	1.00	32.91	0.087	71.862	0.013822	3.3068	0.002731	39.49004	4.936255
	04-07-2016 09	0	62	664.7	0.3250	216.0	1.6523	1098.3	68.2	1.00	26.48	0.087	57.8289	0.011122	3.3068	0.002198	31.77849	3.972311
	04-07-2016 10	0	26	393.7	0.3320	130.7	1.3713	539.9	40.4	1.00	15.69	0.087	34.2519	0.006588	3.3068	0.001302	18.82231	2.352789
	04-07-2016 11	0	21	402.1	0.3280	131.9	1.3867	557.6	41.3	1.00	16.02	0.087	34.9827	0.006728	3.3068	0.00133	19.2239	2.402988
	04-07-2016 12	0	20	344.4	0.2989	103.0	1.3958	480.7	35.4	0.88	13.72	0.087	29.96558	0.005763	3.3068	0.001139	16.46687	2.058359
	04-07-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-09-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-11-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx (lb/mmBtu)	Common Stack NOx (lb/Hr)	Common Stack SO2 (lb/mmBtu)	Common Stack SO2 (lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal (tons/hr)	PM-10 (lb/mmBtu)	PM-10 (lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-13-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-15-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-16-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-18-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (min/utes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-20-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-22-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-24-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-26-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-28-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Supersampled Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-30-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-02-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-04-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-06-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-08-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-10-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (Lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-12-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TEU)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-14-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Time	Y01 Gross Load MW Value	Y02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx (lb/mmBtu)	Common Stack NOx (lb/Hr)	Common Stack SO2 (lb/mmBtu)	Common Stack SO2 (lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-16-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx (lb/mmBtu)	Common Stack NOx (lb/Hr)	Common Stack SO2 (lb/mmBtu)	Common Stack SO2 (lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal (tons/hr)	PM-10 (lb/mmBtu)	PM-10 (lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-18-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-20-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Time	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-22-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-24-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-26-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-28-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (Lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-30-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-01-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-02-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-04-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-06-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-08-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-10-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-12-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-14-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-16-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-18-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-20-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-22-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-24-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-26-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-28-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-30-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-02-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substantiated Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-04-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-06-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-08-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-10-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-11-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-12-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-12-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2016 03	0	0	10.6	0.0079	0.1	0.0198	0.2	1.1	0.42	0.42	0.087	0.924462	0.000178	3.3068	3.51E-05	0.508016	0.063502
	07-13-2016 04	0	0	1.8	0.0118	0.0	0.0102	0.0	0.2	0.03	0.07	0.087	0.154251	2.97E-05	3.3068	5.86E-06	0.084765	0.010596
	07-13-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-13-2016 07	0	0	6.5	0.0000	0.0	0.0329	0.2	0.7	0.43	0.26	0.087	0.568632	0.000109	3.3068	2.16E-05	0.312478	0.03906
	07-13-2016 08	0	0	15.1	0.0000	0.0	0.0331	0.5	1.6	1.00	0.60	0.087	1.3137	0.000253	3.3068	4.99E-05	0.721912	0.090239
	07-13-2016 09	0	0	14.9	0.0000	0.0	0.0268	0.4	1.5	1.00	0.59	0.087	1.2963	0.000249	3.3068	4.93E-05	0.712351	0.089044
	07-13-2016 10	0	0	9.9	0.0000	0.0	0.0404	0.4	1.0	1.00	0.39	0.087	0.8613	0.000166	3.3068	3.27E-05	0.473307	0.059163
	07-13-2016 11	0	0	14.6	0.0068	0.1	0.0616	0.9	1.5	1.00	0.58	0.087	1.2702	0.000244	3.3068	4.83E-05	0.698008	0.087251
	07-13-2016 12	0	0	9.7	0.0000	0.0	0.0619	0.6	1.0	1.00	0.39	0.087	0.8439	0.000162	3.3068	3.21E-05	0.463745	0.057968
	07-13-2016 13	0	0	48.1	0.0125	0.6	0.0125	0.6	4.9	1.00	1.92	0.087	4.1847	0.000805	3.3068	0.000159	2.299602	0.28745
	07-13-2016 14	0	0	78.8	0.0330	2.6	0.0368	2.9	8.1	1.00	3.14	0.087	6.8556	0.001319	3.3068	0.000261	3.767331	0.470916
	07-13-2016 15	0	0	74.3	0.0350	2.6	0.0686	5.1	7.6	1.00	2.96	0.087	6.4641	0.001243	3.3068	0.000246	3.552191	0.444024
	07-13-2016 16	0	0	75.2	0.0386	2.9	0.0598	4.5	7.7	1.00	3.00	0.087	6.5424	0.001258	3.3068	0.000249	3.595219	0.449402
	07-13-2016 17	0	0	77.4	0.0388	3.0	0.0530	4.1	7.9	1.00	3.08	0.087	6.7338	0.001295	3.3068	0.000256	3.700398	0.46255
	07-13-2016 18	0	0	78.2	0.0384	3.0	0.0486	3.8	8.0	1.00	3.12	0.087	6.8034	0.001309	3.3068	0.000259	3.738645	0.467331
	07-13-2016 19	0	0	79.9	0.0375	3.0	0.0463	3.7	8.2	1.00	3.18	0.087	6.9513	0.001337	3.3068	0.000264	3.81992	0.47749
	07-13-2016 20	0	0	80.6	0.0372	3.0	0.0459	3.7	8.3	1.00	3.21	0.087	7.0122	0.001349	3.3068	0.000267	3.853386	0.481673
	07-13-2016 21	0	0	74.3	0.0363	2.7	0.0498	3.7	7.6	1.00	2.96	0.087	6.4641	0.001243	3.3068	0.000246	3.552191	0.444024
	07-13-2016 22	0	0	74.2	0.0364	2.7	0.0526	3.9	7.6	1.00	2.96	0.087	6.4554	0.001242	3.3068	0.000245	3.54741	0.443426
	07-13-2016 23	0	0	74.8	0.0374	2.8	0.0521	3.9	7.7	1.00	2.98	0.087	6.5076	0.001252	3.3068	0.000247	3.576096	0.447012
	07-14-2016 00	0	0	74.9	0.0387	2.9	0.0547	4.1	7.7	1.00	2.98	0.087	6.5163	0.001253	3.3068	0.000248	3.580876	0.44761
	07-14-2016 01	0	0	81.4	0.0405	3.3	0.0504	4.1	8.4	1.00	3.24	0.087	7.0818	0.001362	3.3068	0.000269	3.891633	0.486454

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-14-2016 02	0	0	95.2	0.0431	4.1	0.0578	5.5	9.8	1.00	3.79	0.087	8.2824	0.001593	3.3068	0.000315	4.551394	0.568924
	07-14-2016 03	0	0	101.9	0.0412	4.2	0.0618	6.3	10.5	1.00	4.06	0.087	8.8653	0.001705	3.3068	0.000337	4.871713	0.608964
	07-14-2016 04	0	0	107.9	0.0454	4.9	0.0612	6.6	11.1	1.00	4.30	0.087	9.3873	0.001805	3.3068	0.000357	5.158566	0.644821
	07-14-2016 05	0	0	129.1	0.0550	7.1	0.0720	9.3	13.2	1.00	5.14	0.087	11.2317	0.00216	3.3068	0.000427	6.172112	0.771514
	07-14-2016 06	0	0	126.1	0.0452	5.7	0.0880	11.1	12.9	1.00	5.02	0.087	10.9707	0.00211	3.3068	0.000417	6.028685	0.753586
	07-14-2016 07	0	0	154.5	0.0518	8.0	0.0628	9.7	15.9	1.00	6.16	0.087	13.4415	0.002585	3.3068	0.000511	7.386454	0.923307
	07-14-2016 08	0	0	147.0	0.0517	7.6	0.0639	9.4	15.1	1.00	5.86	0.087	12.789	0.00246	3.3068	0.000486	7.027888	0.878486
	07-14-2016 09	0	0	147.7	0.0569	8.4	0.0643	9.5	15.1	1.00	5.88	0.087	12.8499	0.002471	3.3068	0.000488	7.061355	0.882669
	07-14-2016 10	0	17	344.8	0.3930	135.5	1.0171	350.7	35.4	1.00	13.74	0.087	29.9976	0.00577	3.3068	0.00114	16.48446	2.060558
	07-14-2016 11	0	65	712.0	0.2301	163.8	1.6301	1160.6	73.1	1.00	28.37	0.087	61.944	0.011914	3.3068	0.002354	34.03984	4.25498
	07-14-2016 12	0	98	978.7	0.3690	361.1	1.9207	1879.8	100.4	1.00	38.99	0.087	85.1469	0.016377	3.3068	0.003236	46.79044	5.848805
	07-14-2016 13	0	120	1157.4	0.4100	474.5	1.9828	2294.9	118.7	1.00	46.11	0.087	100.6938	0.019367	3.3068	0.003827	55.33386	6.916733
	07-14-2016 14	0	123	1155.0	0.3920	452.8	2.0087	2320.1	118.5	1.00	46.02	0.087	100.485	0.019327	3.3068	0.003819	55.21912	6.90239
	07-14-2016 15	0	142	1336.0	0.5490	733.5	1.9893	2657.7	137.1	1.00	53.23	0.087	116.232	0.022355	3.3068	0.004418	63.87251	7.984064
	07-14-2016 16	0	142	1309.0	0.5250	687.2	2.0028	2621.6	134.3	1.00	52.15	0.087	113.883	0.021904	3.3068	0.004329	62.58167	7.822709
	07-14-2016 17	0	154	1410.0	0.4770	672.6	2.0476	2887.1	144.7	1.00	56.18	0.087	122.67	0.023594	3.3068	0.004663	67.41036	8.426295
	07-14-2016 18	0	171	1566.6	0.4740	742.6	2.0709	3244.3	160.7	1.00	62.41	0.087	136.2942	0.026214	3.3068	0.00518	74.89721	9.362151
	07-14-2016 19	0	167	1541.1	0.5000	770.6	2.0132	3102.5	158.1	1.00	61.40	0.087	134.0757	0.025787	3.3068	0.005096	73.67809	9.209761
	07-14-2016 20	0	171	1594.8	0.4630	738.4	1.9724	3145.6	163.6	1.00	63.54	0.087	138.7476	0.026686	3.3068	0.005274	76.24542	9.530677
	07-14-2016 21	0	171	1596.5	0.4580	731.2	1.9894	3176.0	163.8	1.00	63.61	0.087	138.8955	0.026714	3.3068	0.005279	76.32669	9.540837
	07-14-2016 22	0	171	1599.6	0.4490	718.2	1.9941	3189.7	164.1	1.00	63.73	0.087	139.1652	0.026766	3.3068	0.00529	76.4749	9.559363
	07-14-2016 23	0	142	1367.9	0.4430	606.0	1.9884	2720.0	140.3	1.00	54.50	0.087	119.0073	0.022889	3.3068	0.004523	65.39761	8.174701
	07-15-2016 00	0	130	1293.0	0.4540	587.0	1.9813	2561.8	132.7	1.00	51.51	0.087	112.491	0.021636	3.3068	0.004276	61.81673	7.727092
	07-15-2016 01	0	130	1276.0	0.4230	539.7	1.9590	2499.7	130.9	1.00	50.84	0.087	111.012	0.021351	3.3068	0.004219	61.00398	7.625498
	07-15-2016 02	0	129	1281.9	0.4260	546.1	1.9573	2509.1	131.5	1.00	51.07	0.087	111.5253	0.02145	3.3068	0.004239	61.28606	7.660757
	07-15-2016 03	0	130	1272.5	0.4310	548.4	1.9764	2515.0	130.6	1.00	50.70	0.087	110.7075	0.021293	3.3068	0.004208	60.83665	7.604582
	07-15-2016 04	0	129	1285.3	0.4440	570.7	1.9586	2517.4	131.9	1.00	51.21	0.087	111.8211	0.021507	3.3068	0.00425	61.44861	7.681076
	07-15-2016 05	0	140	1363.0	0.4650	633.8	1.9419	2646.8	139.8	1.00	54.30	0.087	118.581	0.022807	3.3068	0.004507	65.16335	8.145418
	07-15-2016 06	0	162	1505.1	0.4940	743.5	1.9606	2950.9	154.4	1.00	59.96	0.087	130.9437	0.025185	3.3068	0.004977	71.95697	8.994622
	07-15-2016 07	0	164	1510.5	0.5010	756.8	1.9743	2982.2	155.0	1.00	60.18	0.087	131.4135	0.025275	3.3068	0.004995	72.21514	9.026892
	07-15-2016 08	0	164	1523.7	0.4860	740.5	1.9459	2964.9	156.3	1.00	60.71	0.087	132.5619	0.025496	3.3068	0.005039	72.84622	9.105777
	07-15-2016 09	0	165	1535.8	0.4820	740.3	1.9406	2980.4	157.6	1.00	61.19	0.087	133.6146	0.025699	3.3068	0.005079	73.4247	9.178088
	07-15-2016 10	0	167	1542.8	0.4840	746.7	1.9364	2987.5	158.3	1.00	61.47	0.087	134.2236	0.025816	3.3068	0.005102	73.75936	9.21992
	07-15-2016 11	0	168	1555.4	0.4950	769.9	1.9194	2985.4	159.6	1.00	61.97	0.087	135.3198	0.026027	3.3068	0.005143	74.36175	9.295219
	07-15-2016 12	0	168	1559.0	0.5000	779.5	1.8900	2946.5	159.9	1.00	62.11	0.087	135.633	0.026087	3.3068	0.005155	74.53386	9.316733
	07-15-2016 13	0	167	1545.7	0.4890	755.8	1.8730	2895.1	158.6	1.00	61.58	0.087	134.4759	0.025864	3.3068	0.005111	73.89801	9.237251
	07-15-2016 14	0	166	1530.5	0.4750	727.0	1.8749	2869.5	157.0	1.00	60.98	0.087	133.1535	0.02561	3.3068	0.005061	73.17131	9.146414
	07-15-2016 15	0	164	1498.2	0.4790	717.6	1.8779	2813.4	153.7	1.00	59.69	0.087	130.3434	0.025069	3.3068	0.004954	71.62709	8.953386
	07-15-2016 16	0	165	1523.4	0.4740	722.1	1.9055	2902.8	156.3	1.00	60.85	0.087	132.8838	0.025558	3.3068	0.005051	73.02311	9.127888
	07-15-2016 17	0	164	1492.5	0.4790	714.9	1.9248	2872.8	153.1	1.00	59.46	0.087	129.8475	0.025491	3.3068	0.005038	72.83187	9.103984
	07-15-2016 18	0	162	1483.0	0.4830	716.3	1.8868	2798.1	152.2	1.00	59.08	0.087	129.021	0.024815	3.3068	0.004904	70.9004	8.86255
	07-15-2016 19	0	162	1489.6	0.4730	704.6	1.8856	2808.8	152.8	1.00	59.35	0.087	129.5952	0.024926	3.3068	0.004926	71.21594	8.901992
	07-15-2016 20	0	114	1044.1	0.3840	400.9	1.7578	1835.3	107.1	1.00	41.60	0.087	90.8367	0.017471	3.3068	0.003453	49.91713	6.239641
	07-15-2016 21	0	9	98.6	0.3331	32.9	1.3426	132.4	10.1	0.30	3.93	0.087	8.57907	0.00165	3.3068	0.000326	4.714422	0.589303
	07-15-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-16-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2016 20	0	0	33.2	0.0190	0.6	0.0401	1.3	3.4	0.70	1.32	0.087	2.88666	0.000555	3.3068	0.00011	1.586295	0.198287
	07-17-2016 21	0	0	79.6	0.0327	2.6	0.0641	5.1	8.2	1.00	3.17	0.087	6.9252	0.001332	3.3068	0.000263	3.805578	0.475697
	07-17-2016 22	0	0	100.4	0.0418	4.2	0.0707	7.1	10.3	1.00	4.00	0.087	8.7348	0.00168	3.3068	0.000332	4.8	0.6
	07-17-2016 23	0	0	98.3	0.0427	4.2	0.0712	7.0	10.1	1.00	3.92	0.087	8.5521	0.001645	3.3068	0.000325	4.699602	0.58745

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-18-2016 00	0	0	107.5	0.0437	4.7	0.0735	7.9	11.0	1.00	4.28	0.087	9.3525	0.001799	3.3068	0.000355	5.139442	0.64243
	07-18-2016 01	0	0	94.1	0.0425	4.0	0.0786	7.4	9.7	1.00	3.75	0.087	8.1867	0.001575	3.3068	0.000311	4.498805	0.562351
	07-18-2016 02	0	0	102.8	0.0467	4.8	0.0749	7.7	10.5	1.00	4.10	0.087	8.9436	0.00172	3.3068	0.00034	4.914741	0.614343
	07-18-2016 03	0	0	117.4	0.0477	5.6	0.0741	8.7	12.0	1.00	4.68	0.087	10.2138	0.001954	3.3068	0.000388	5.612749	0.701594
	07-18-2016 04	0	0	146.0	0.0527	7.7	0.0781	11.4	15.0	1.00	5.82	0.087	12.702	0.002443	3.3068	0.000483	6.98008	0.87251
	07-18-2016 05	0	0	154.4	0.0557	8.6	0.0725	11.2	15.8	1.00	6.15	0.087	13.4328	0.002584	3.3068	0.000511	7.381673	0.922709
	07-18-2016 06	0	4	201.1	0.1750	35.2	0.5520	111.0	20.6	1.00	8.01	0.087	17.4957	0.003365	3.3068	0.000665	9.614343	1.201793
	07-18-2016 07	0	17	342.8	0.3941	135.1	1.1464	393.0	35.2	1.00	13.66	0.087	29.8236	0.005736	3.3068	0.001134	16.38884	2.048606
	07-18-2016 08	0	59	678.6	0.3481	236.2	1.5918	1080.2	69.6	1.00	27.04	0.087	59.0382	0.011355	3.3068	0.002244	32.44303	4.055378
	07-18-2016 09	0	97	1007.6	0.5100	513.9	1.8080	1821.7	103.4	1.00	40.14	0.087	87.6612	0.01686	3.3068	0.003332	48.17211	6.021514
	07-18-2016 10	0	106	1028.3	0.5920	608.8	1.7755	1825.7	105.5	1.00	40.97	0.087	89.4621	0.017207	3.3068	0.0034	49.16175	6.145219
	07-18-2016 11	0	107	1068.7	0.5240	560.0	1.7994	1923.0	109.6	1.00	42.58	0.087	92.9769	0.017883	3.3068	0.003534	51.09323	6.386653
	07-18-2016 12	0	145	1398.3	0.5370	750.9	1.8059	2525.2	143.5	1.00	55.71	0.087	121.6521	0.023398	3.3068	0.004624	66.851	8.356375
	07-18-2016 13	0	158	1460.5	0.4830	705.4	1.7994	2628.0	149.8	1.00	58.19	0.087	127.0635	0.024439	3.3068	0.00483	69.8247	8.728088
	07-18-2016 14	0	158	1475.7	0.4680	690.6	1.7872	2637.3	151.4	1.00	58.79	0.087	128.3859	0.024693	3.3068	0.00488	70.55139	8.818924
	07-18-2016 15	0	151	1415.5	0.4820	682.3	1.7786	2517.6	145.2	1.00	56.39	0.087	123.1485	0.023686	3.3068	0.004681	67.67331	8.459163
	07-18-2016 16	0	158	1456.8	0.5200	757.5	1.7755	2586.6	149.5	1.00	58.04	0.087	126.7416	0.024377	3.3068	0.004817	69.64781	8.705976
	07-18-2016 17	0	154	1438.9	0.5300	762.6	1.7473	2514.2	147.6	1.00	57.33	0.087	125.1843	0.024077	3.3068	0.004758	68.79203	8.599004
	07-18-2016 18	0	159	1452.7	0.4510	655.2	1.6784	2438.2	149.0	1.00	57.88	0.087	126.3849	0.024308	3.3068	0.004804	69.45179	8.681474
	07-18-2016 19	0	160	1469.9	0.4740	696.7	1.6854	2477.4	150.8	1.00	58.56	0.087	127.8813	0.024596	3.3068	0.004861	70.2741	8.784263
	07-18-2016 20	0	109	1039.3	0.4400	457.3	1.5981	1660.9	106.6	1.00	41.41	0.087	90.4191	0.017391	3.3068	0.003437	49.68765	6.210956
	07-18-2016 21	0	3	74.3	0.4011	29.8	1.2268	91.2	7.6	0.20	2.96	0.087	6.46758	0.001244	3.3068	0.000246	3.554104	0.444263
	07-18-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-19-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Subscription Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-19-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-20-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-21-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
TRUE	07-21-2016 17	0	0	0.2	0.0000	0.0	0.8000	0.1	0.0	0.17	0.01	0.087	0.01479	2.84E-06	3.3068	5.62E-07	0.008127	0.001016
TRUE	07-21-2016 18	0	0	1.0	0.0000	0.0	1.1000	1.1	0.0	1.00	0.04	0.087	0.087	1.67E-05	3.3068	3.31E-06	0.047809	0.005976
TRUE	07-21-2016 19	0	0	0.7	0.0000	0.0	1.1000	0.8	0.0	0.72	0.03	0.087	0.06264	1.2E-05	3.3068	2.38E-06	0.034422	0.004303
TRUE	07-21-2016 20	0	0	0.4	0.0000	0.0	1.8000	0.7	0.0	0.40	0.02	0.087	0.0348	6.69E-06	3.3068	1.32E-06	0.019124	0.00239
	07-21-2016 21	1	1	9.2	0.0068	0.1	0.1486	1.4	0.9	0.62	0.37	0.087	0.798312	0.000154	3.3068	3.03E-05	0.438693	0.054837

DOE-17-0427-B-000433

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-21-2016 22	0	0	108.8	0.0211	2.3	0.0515	5.6	11.2	1.00	4.33	0.087	9.4656	0.001821	3.3068	0.00036	5.201594	0.650199
	07-21-2016 23	0	0	110.3	0.0263	2.9	0.0598	6.6	11.3	1.00	4.39	0.087	9.5961	0.001846	3.3068	0.000365	5.273307	0.659163
	07-22-2016 00	0	0	127.0	0.0307	3.9	0.0520	6.6	13.0	1.00	5.06	0.087	11.049	0.002125	3.3068	0.00042	6.071713	0.758964
	07-22-2016 01	0	0	225.9	0.0500	11.3	0.0514	11.6	23.2	1.00	9.00	0.087	19.6533	0.00378	3.3068	0.000747	10.8	1.35
	07-22-2016 02	0	0	207.9	0.0519	10.8	0.0529	11.0	21.3	1.00	8.28	0.087	18.0873	0.003479	3.3068	0.000687	9.939442	1.24243
	07-22-2016 03	0	0	206.1	0.0509	10.5	0.0505	10.4	21.1	1.00	8.21	0.087	17.9307	0.003449	3.3068	0.000682	9.853386	1.231673
	07-22-2016 04	0	0	221.2	0.0552	12.2	0.0511	11.3	22.7	1.00	8.81	0.087	19.2444	0.003701	3.3068	0.000731	10.5753	1.321912
	07-22-2016 05	0	0	226.5	0.0521	11.8	0.0618	14.0	23.2	1.00	9.02	0.087	19.7055	0.00379	3.3068	0.000749	10.82869	1.353586
	07-22-2016 06	0	4	261.0	0.1011	26.4	0.3471	90.6	26.8	1.00	10.40	0.087	22.707	0.004367	3.3068	0.000863	12.47809	1.559761
	07-22-2016 07	0	20	411.3	0.1969	81.0	0.9288	382.0	42.2	1.00	16.39	0.087	35.7831	0.006882	3.3068	0.00136	19.66375	2.457968
	07-22-2016 08	0	68	765.1	0.2210	169.1	1.3453	1029.3	78.5	1.00	30.48	0.087	66.5637	0.012802	3.3068	0.00253	36.57849	4.572311
	07-22-2016 09	8	104	1170.4	0.4830	565.3	1.4347	1679.2	120.1	1.00	46.63	0.087	101.8248	0.019584	3.3068	0.00387	55.95538	6.994422
	07-22-2016 10	42	107	1448.6	0.4480	649.0	1.5770	2284.4	148.6	1.00	57.71	0.087	126.0282	0.02424	3.3068	0.00479	69.25578	8.656972
	07-22-2016 11	79	107	1814.6	0.4250	771.2	1.6957	3077.1	186.2	1.00	72.29	0.087	157.8702	0.030364	3.3068	0.006	86.75378	10.84422
	07-22-2016 12	109	131	2341.4	0.4660	1091.1	1.8177	4255.9	240.2	1.00	93.28	0.087	203.7018	0.039179	3.3068	0.007742	111.9394	13.99243
	07-22-2016 13	111	151	2516.3	0.4680	1177.6	1.8223	4585.5	258.2	1.00	100.25	0.087	218.9181	0.042105	3.3068	0.008321	120.3012	15.03765
	07-22-2016 14	113	159	2583.9	0.4610	1191.2	1.8291	4726.2	265.1	1.00	102.94	0.087	224.7993	0.043237	3.3068	0.008544	123.5331	15.44163
	07-22-2016 15	111	159	2547.8	0.4470	1138.9	1.8516	4717.6	261.4	1.00	101.51	0.087	221.6586	0.042633	3.3068	0.008425	121.8072	15.2259
	07-22-2016 16	112	159	2568.1	0.4410	1132.5	1.8443	4736.4	263.5	1.00	102.31	0.087	223.4247	0.042972	3.3068	0.008492	122.7777	15.34721
	07-22-2016 17	112	159	2569.9	0.4410	1133.3	1.8484	4750.2	263.7	1.00	102.39	0.087	223.5813	0.043002	3.3068	0.008498	122.8637	15.35797
	07-22-2016 18	112	145	2467.5	0.4340	1070.9	1.8477	4559.3	253.2	1.00	98.31	0.087	214.6725	0.041289	3.3068	0.008159	117.9681	14.74602
	07-22-2016 19	112	147	2507.7	0.4380	1098.4	1.8542	4649.8	257.3	1.00	99.91	0.087	218.1699	0.041962	3.3068	0.008292	119.89	14.98625
	07-22-2016 20	114	132	2389.5	0.4310	1029.9	1.8577	4439.0	245.2	1.00	95.20	0.087	207.8865	0.039984	3.3068	0.007902	114.239	14.27988
	07-22-2016 21	114	144	2458.2	0.4490	1103.7	1.8571	4565.1	252.2	1.00	97.94	0.087	213.8634	0.041133	3.3068	0.008129	117.5235	14.69044
	07-22-2016 22	113	143	2431.9	0.4460	1084.6	1.8646	4534.5	249.5	1.00	96.89	0.087	211.5753	0.040693	3.3068	0.008042	116.2661	14.53327
	07-22-2016 23	113	143	2427.8	0.4480	1087.7	1.8636	4524.5	249.1	1.00	96.73	0.087	211.2186	0.040625	3.3068	0.008028	116.0701	14.50876
	07-23-2016 00	98	134	2199.2	0.4560	1002.8	1.8607	4092.1	225.6	1.00	87.62	0.087	191.3304	0.036799	3.3068	0.007272	105.141	13.14263
	07-23-2016 01	97	124	2146.4	0.4560	978.8	1.8621	3996.8	220.2	1.00	85.51	0.087	186.7368	0.035916	3.3068	0.007098	102.6167	12.82709
	07-23-2016 02	97	122	2137.7	0.4620	987.6	1.8474	3949.1	219.3	1.00	85.17	0.087	185.9799	0.03577	3.3068	0.007069	102.2008	12.7751
	07-23-2016 03	99	104	1972.6	0.4790	944.9	1.8495	3648.4	202.4	1.00	78.59	0.087	171.6162	0.033008	3.3068	0.006523	94.30757	11.78845
	07-23-2016 04	98	104	1966.9	0.4750	934.3	1.8421	3623.3	201.8	1.00	78.36	0.087	171.1203	0.032912	3.3068	0.006504	94.03506	11.75438
	07-23-2016 05	98	104	1971.4	0.4760	938.4	1.8204	3588.7	202.3	1.00	78.54	0.087	171.5118	0.032988	3.3068	0.006519	94.2502	11.78127
	07-23-2016 06	100	108	2044.8	0.4900	1002.0	1.8331	3748.3	209.8	1.00	81.47	0.087	177.8976	0.034216	3.3068	0.006762	97.75936	12.21992
	07-23-2016 07	113	140	2448.6	0.4570	1119.0	1.8302	4481.4	251.2	1.00	97.55	0.087	213.0282	0.040973	3.3068	0.008097	117.0645	14.63307
	07-23-2016 08	114	151	2520.8	0.4450	1121.8	1.8326	4619.7	258.6	1.00	100.43	0.087	219.3096	0.042181	3.3068	0.008336	120.5163	15.06454
	07-23-2016 09	114	162	2614.9	0.4470	1168.9	1.8338	4795.2	268.3	1.00	104.18	0.087	227.4963	0.043755	3.3068	0.008647	125.0151	15.62689
	07-23-2016 10	114	161	2617.6	0.4370	1143.9	1.8252	4777.7	268.6	1.00	104.29	0.087	227.7312	0.0438	3.3068	0.008656	125.1442	15.64303
	07-23-2016 11	114	145	2499.6	0.4320	1079.8	1.8198	4548.8	256.5	1.00	99.59	0.087	217.4652	0.041826	3.3068	0.008266	119.5028	14.93785
	07-23-2016 12	112	125	2316.2	0.4300	996.0	1.8284	4234.9	237.6	1.00	92.28	0.087	201.5094	0.038757	3.3068	0.007659	110.7347	13.84183
	07-23-2016 13	112	143	2474.9	0.4400	1089.0	1.8142	4489.9	253.9	1.00	98.60	0.087	215.3163	0.041413	3.3068	0.008184	118.3219	14.79024
	07-23-2016 14	111	161	2640.3	0.4580	1209.3	1.8012	4755.7	270.9	1.00	105.19	0.087	229.7061	0.04418	3.3068	0.008731	126.2295	15.77869
	07-23-2016 15	111	161	2622.3	0.4540	1190.5	1.7993	4718.4	269.0	1.00	104.47	0.087	228.1401	0.043879	3.3068	0.008671	125.3689	15.67112
	07-23-2016 16	110	161	2606.5	0.4440	1157.3	1.8080	4712.6	267.4	1.00	103.84	0.087	226.7655	0.043615	3.3068	0.008619	124.6135	15.57669
	07-23-2016 17	106	161	2569.4	0.4440	1140.8	1.8003	4625.6	263.6	1.00	102.37	0.087	223.5378	0.042994	3.3068	0.008496	122.8398	15.35498
	07-23-2016 18	102	161	2526.2	0.4500	1136.8	1.8094	4571.0	259.2	1.00	100.65	0.087	219.7794	0.042271	3.3068	0.008354	120.7745	15.09681
	07-23-2016 19	107	158	2567.7	0.4350	1116.9	1.8065	4638.5	263.4	1.00	102.30	0.087	223.3899	0.042965	3.3068	0.008491	122.7586	15.34482
	07-23-2016 20	108	160	2580.5	0.4310	1112.2	1.8289	4719.5	264.8	1.00	102.81	0.087	224.5035	0.04318	3.3068	0.008533	123.3705	15.42131

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	Y101 Gross Load MW Value	Y102 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-23-2016 21	108	161	2608.3	0.4360	1137.2	1.8332	4781.6	267.6	1.00	103.92	0.087	226.9221	0.043645	3.3068	0.008625	124.6996	15.58745
	07-23-2016 22	109	159	2587.7	0.4330	1120.5	1.8395	4760.0	265.5	1.00	103.10	0.087	225.1299	0.0433	3.3068	0.008557	123.7147	15.46434
	07-23-2016 23	106	134	2307.8	0.4260	983.1	1.8513	4272.4	236.8	1.00	91.94	0.087	200.7786	0.038617	3.3068	0.007631	110.3331	13.79163
	07-24-2016 00	98	100	1950.8	0.4440	866.2	1.8470	3603.1	200.2	1.00	77.72	0.087	169.7196	0.032643	3.3068	0.006451	93.26534	11.65817
	07-24-2016 01	97	97	1931.1	0.4480	865.1	1.8545	3581.2	198.1	1.00	76.94	0.087	168.0057	0.032313	3.3068	0.006386	92.32351	11.54044
	07-24-2016 02	99	97	1957.4	0.4570	894.5	1.8399	3601.5	200.8	1.00	77.98	0.087	170.2938	0.032753	3.3068	0.006473	93.58088	11.69761
	07-24-2016 03	97	99	1930.9	0.4770	921.0	1.8498	3571.8	198.1	1.00	76.93	0.087	167.9883	0.03231	3.3068	0.006385	92.31394	11.53924
	07-24-2016 04	97	99	1938.0	0.4760	922.5	1.8519	3588.9	198.8	1.00	77.21	0.087	168.606	0.032429	3.3068	0.006409	92.65339	11.58167
	07-24-2016 05	98	99	1938.5	0.4890	947.9	1.8227	3533.3	198.9	1.00	77.23	0.087	168.6495	0.032437	3.3068	0.00641	92.67729	11.58466
	07-24-2016 06	98	100	1951.5	0.4830	942.6	1.8425	3595.7	200.2	1.00	77.75	0.087	169.7805	0.032655	3.3068	0.006453	93.2988	11.66235
	07-24-2016 07	101	104	2007.3	0.4760	955.5	1.8482	3709.9	205.9	1.00	79.97	0.087	174.6351	0.033588	3.3068	0.006638	95.96653	11.99582
	07-24-2016 08	114	126	2342.3	0.4560	1068.1	1.8633	4364.4	240.3	1.00	93.32	0.087	203.7801	0.039194	3.3068	0.007745	111.9825	13.99781
	07-24-2016 09	114	157	2617.6	0.4560	1193.6	1.8799	4920.8	268.6	1.00	104.29	0.087	227.7312	0.0438	3.3068	0.008656	125.1442	15.64303
	07-24-2016 10	114	166	2678.3	0.4500	1205.2	1.8988	5085.6	274.8	1.00	106.71	0.087	233.0121	0.044816	3.3068	0.008857	128.0462	16.00578
	07-24-2016 11	114	166	2698.4	0.4430	1195.4	1.9079	5148.4	276.9	1.00	107.51	0.087	234.7608	0.045153	3.3068	0.008923	129.0072	16.1259
	07-24-2016 12	114	166	2687.3	0.4430	1190.5	1.9263	5176.6	275.7	1.00	107.06	0.087	233.7951	0.044967	3.3068	0.008886	128.4765	16.05956
	07-24-2016 13	114	165	2693.0	0.4330	1166.1	1.9284	5193.1	276.3	1.00	107.29	0.087	234.291	0.045062	3.3068	0.008905	128.7749	16.09363
	07-24-2016 14	114	165	2685.3	0.4230	1135.9	1.9539	5246.8	275.5	1.00	106.98	0.087	233.6211	0.044933	3.3068	0.00888	128.3809	16.04761
	07-24-2016 15	114	165	2685.8	0.4220	1133.4	1.9613	5267.7	275.6	1.00	107.00	0.087	233.6646	0.044942	3.3068	0.008881	128.4048	16.0506
	07-24-2016 16	114	164	2686.1	0.4190	1125.5	1.9536	5247.5	275.6	1.00	107.02	0.087	233.6907	0.044947	3.3068	0.008882	128.4191	16.05239
	07-24-2016 17	114	164	2686.4	0.4200	1128.3	1.9558	5254.0	275.6	1.00	107.03	0.087	233.7168	0.044952	3.3068	0.008883	128.4335	16.05418
	07-24-2016 18	114	136	2416.7	0.4150	1002.9	1.9286	4660.8	248.0	1.00	96.28	0.087	210.2529	0.040439	3.3068	0.007991	115.5394	14.44243
	07-24-2016 19	114	114	2208.5	0.4210	929.8	1.9169	4233.5	226.6	1.00	87.99	0.087	192.1395	0.036955	3.3068	0.007303	105.5857	13.19821
	07-24-2016 20	114	114	2217.5	0.4260	944.7	1.8959	4204.2	227.5	1.00	88.35	0.087	192.9225	0.037106	3.3068	0.007333	106.0159	13.25199
	07-24-2016 21	115	118	2251.0	0.4330	974.7	1.9104	4300.2	231.0	1.00	89.68	0.087	195.837	0.037666	3.3068	0.007444	107.6175	13.45219
	07-24-2016 22	113	139	2455.7	0.4570	1122.3	1.8912	4644.3	252.0	1.00	97.84	0.087	213.6459	0.041091	3.3068	0.00812	117.404	14.6755
	07-24-2016 23	115	122	2301.4	0.4300	989.6	1.8776	4321.2	236.1	1.00	91.69	0.087	200.2218	0.038509	3.3068	0.00761	110.0271	13.75339
	07-25-2016 00	102	104	2012.5	0.4120	829.2	1.8660	3755.3	206.5	1.00	80.18	0.087	175.0875	0.033675	3.3068	0.006655	96.21514	12.02689
	07-25-2016 01	98	98	1945.9	0.4110	799.8	1.8529	3605.5	199.6	1.00	77.53	0.087	169.2933	0.032561	3.3068	0.006435	93.03108	11.62888
	07-25-2016 02	98	98	1938.5	0.4210	816.1	1.8469	3580.2	198.9	1.00	77.23	0.087	168.6495	0.032437	3.3068	0.006417	92.78247	11.59781
	07-25-2016 03	98	98	1940.7	0.4260	826.7	1.8311	3553.6	199.1	1.00	77.32	0.087	168.8409	0.032474	3.3068	0.006417	92.78247	11.59781
	07-25-2016 04	98	98	1923.0	0.4240	815.4	1.8278	3514.9	197.3	1.00	76.61	0.087	167.301	0.032178	3.3068	0.006359	91.93625	11.49203
	07-25-2016 05	98	98	1949.3	0.4220	822.6	1.7905	3490.2	200.0	1.00	77.66	0.087	169.5891	0.032618	3.3068	0.006446	93.19363	11.6492
	07-25-2016 06	107	111	2129.4	0.4380	932.7	1.8083	3850.7	218.5	1.00	84.84	0.087	185.2578	0.035631	3.3068	0.007041	101.804	12.7255
	07-25-2016 07	113	150	2490.2	0.4590	1143.0	1.8289	4554.4	255.5	1.00	99.21	0.087	216.6474	0.041669	3.3068	0.008235	119.0534	14.88167
TRUE	07-25-2016 08	113	165	2503.5	0.9930	2483.0	1.8210	4552.5	255.1	1.00	99.82	0.087	217.9785	0.041925	3.3068	0.008285	119.7849	14.97311
	07-25-2016 09	113	166	2437.0	0.4590	1118.6	1.8124	4416.8	250.0	1.00	97.09	0.087	212.019	0.040778	3.3068	0.008059	116.51	14.56375
	07-25-2016 10	113	166	2455.2	0.4510	1107.3	1.8203	4469.2	251.9	1.00	97.82	0.087	213.6024	0.041083	3.3068	0.008119	117.3801	14.67251
	07-25-2016 11	113	166	2555.7	0.4380	1119.4	1.8480	4723.0	262.2	1.00	101.82	0.087	222.3459	0.042765	3.3068	0.008451	122.1849	15.27311
	07-25-2016 12	112	166	2539.7	0.4380	1112.4	1.8477	4692.6	260.6	1.00	101.18	0.087	220.9539	0.042497	3.3068	0.008398	121.4199	15.17749
	07-25-2016 13	113	166	2506.7	0.4430	1110.5	1.8591	4660.3	257.2	1.00	99.87	0.087	218.0829	0.041945	3.3068	0.008289	119.8422	14.98028
	07-25-2016 14	112	166	2529.9	0.4440	1123.3	1.8620	4710.7	259.6	1.00	100.79	0.087	220.1013	0.042333	3.3068	0.008366	120.9514	15.11892
	07-25-2016 15	113	166	2506.2	0.4510	1130.3	1.8854	4725.3	257.1	1.00	99.85	0.087	218.0394	0.041936	3.3068	0.008287	119.8183	14.97729
	07-25-2016 16	113	165	2534.7	0.4480	1135.5	1.8688	4736.8	260.1	1.00	100.98	0.087	220.5189	0.042413	3.3068	0.008382	121.1809	15.14761
	07-25-2016 17	112	165	2538.5	0.4500	1142.3	1.8701	4747.3	260.5	1.00	101.14	0.087	220.8495	0.042477	3.3068	0.008394	121.3625	15.17032
	07-25-2016 18	113	163	2499.6	0.4520	1129.8	1.8765	4690.6	256.5	1.00	99.59	0.087	217.4652	0.041826	3.3068	0.008266	119.5028	14.93785
	07-25-2016 19	112	162	2490.3	0.4500	1120.6	1.8660	4647.0	255.5	1.00	99.22	0.087	216.6561	0.04167	3.3068	0.008235	119.0582	14.88227

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-25-2016 20	112	162	2469.6	0.4540	1121.2	1.8678	4612.7	253.4	1.00	98.39	0.087	214.8552	0.041324	3.3068	0.008166	118.0685	14.75857
	07-25-2016 21	111	162	2476.6	0.4490	1112.0	1.8525	4588.0	254.1	1.00	98.67	0.087	215.4642	0.041441	3.3068	0.00819	118.4032	14.8004
	07-25-2016 22	113	156	2443.5	0.4450	1087.4	1.8369	4488.5	250.7	1.00	97.35	0.087	212.5845	0.040887	3.3068	0.00808	116.8207	14.60259
	07-25-2016 23	106	103	1933.7	0.4250	821.8	1.8262	3531.3	198.4	1.00	77.04	0.087	168.2319	0.032357	3.3068	0.006394	92.44781	11.55598
	07-26-2016 00	103	98	1868.4	0.4220	788.5	1.8452	3447.6	191.7	1.00	74.44	0.087	162.5508	0.031264	3.3068	0.006178	89.3259	11.16574
	07-26-2016 01	99	98	1851.0	0.4290	794.1	1.8220	3372.5	189.9	1.00	73.75	0.087	161.037	0.030973	3.3068	0.006121	88.49402	11.06175
	07-26-2016 02	97	98	1825.0	0.4390	801.2	1.8255	3331.6	187.2	1.00	72.71	0.087	158.775	0.030538	3.3068	0.006035	87.251	10.90637
	07-26-2016 03	97	98	1829.0	0.4420	808.4	1.8134	3316.7	187.7	1.00	72.87	0.087	159.123	0.030605	3.3068	0.006048	87.44223	10.93028
	07-26-2016 04	99	111	1916.3	0.4470	856.6	1.8335	3513.5	196.6	1.00	76.35	0.087	166.7181	0.032066	3.3068	0.006337	91.61594	11.45199
	07-26-2016 05	98	140	2160.6	0.4740	1024.1	1.8040	3897.8	221.7	1.00	86.08	0.087	187.9722	0.036153	3.3068	0.007145	103.2956	12.91195
	07-26-2016 06	109	147	2378.8	0.4920	1170.4	1.8035	4290.1	244.1	1.00	94.77	0.087	206.9556	0.039805	3.3068	0.007866	113.7275	14.21594
	07-26-2016 07	113	151	2476.2	0.4470	1106.9	1.8192	4504.6	254.1	1.00	98.65	0.087	215.4294	0.041434	3.3068	0.008188	118.3841	14.79801
	07-26-2016 08	113	164	2611.5	0.4480	1170.0	1.8220	4758.2	267.9	1.00	104.04	0.087	227.2005	0.043698	3.3068	0.008636	126.7363	15.60657
	07-26-2016 09	114	164	2620.4	0.4530	1187.0	1.8182	4764.4	268.8	1.00	104.40	0.087	227.9748	0.043847	3.3068	0.008665	125.2781	15.65976
	07-26-2016 10	113	164	2650.9	0.4480	1187.6	1.7984	4767.5	272.0	1.00	105.61	0.087	230.6283	0.044358	3.3068	0.008766	126.7363	15.84203
	07-26-2016 11	114	164	2638.6	0.4470	1179.5	1.8019	4754.6	270.7	1.00	105.12	0.087	229.5582	0.044152	3.3068	0.008725	126.1482	15.76853
	07-26-2016 12	115	164	2647.1	0.4360	1154.1	1.7978	4758.9	271.6	1.00	105.46	0.087	230.2977	0.044294	3.3068	0.008753	126.5546	15.81932
	07-26-2016 13	115	163	2660.4	0.4390	1167.9	1.8031	4796.9	273.0	1.00	105.99	0.087	231.4548	0.044517	3.3068	0.008797	127.1904	15.8988
	07-26-2016 14	117	163	2670.0	0.4390	1172.1	1.8018	4810.8	273.9	1.00	106.37	0.087	232.29	0.044677	3.3068	0.008829	127.6494	15.95618
	07-26-2016 15	117	164	2653.8	0.4420	1173.0	1.8158	4818.7	272.3	1.00	105.73	0.087	230.8806	0.044406	3.3068	0.008776	126.8749	15.85936
	07-26-2016 16	117	164	2655.0	0.4430	1176.2	1.8007	4780.8	272.4	1.00	105.78	0.087	230.985	0.044426	3.3068	0.008779	126.9323	15.86653
	07-26-2016 17	117	163	2648.9	0.4430	1173.5	1.7987	4764.7	271.8	1.00	105.53	0.087	230.4543	0.044324	3.3068	0.008759	126.6406	15.83008
	07-26-2016 18	115	161	2606.0	0.4450	1159.7	1.7988	4687.8	267.4	1.00	103.82	0.087	226.722	0.043606	3.3068	0.008617	124.5896	15.57371
	07-26-2016 19	117	162	2625.7	0.4370	1147.4	1.7969	4718.1	269.4	1.00	104.61	0.087	228.4359	0.043936	3.3068	0.008683	125.5315	15.69143
	07-26-2016 20	117	162	2655.1	0.4330	1149.7	1.7828	4733.6	272.4	1.00	105.78	0.087	230.9937	0.044428	3.3068	0.00878	126.9371	15.86713
	07-26-2016 21	116	161	2618.8	0.4390	1149.7	1.7780	4656.3	268.7	1.00	104.33	0.087	227.8356	0.043821	3.3068	0.00866	125.2016	15.6502
	07-26-2016 22	116	147	2467.3	0.4420	1090.5	1.7708	4369.2	253.1	1.00	98.30	0.087	214.6551	0.041285	3.3068	0.008159	117.9586	14.74482
	07-26-2016 23	115	97	2052.3	0.4130	847.6	1.7626	3617.4	210.6	1.00	81.76	0.087	178.5501	0.034341	3.3068	0.006786	98.11793	12.26474
	07-27-2016 00	115	94	2061.2	0.4140	853.3	1.7583	3624.2	211.5	1.00	82.12	0.087	179.3244	0.03449	3.3068	0.006816	98.54343	12.31793
	07-27-2016 01	112	98	2043.8	0.4220	862.5	1.7530	3582.7	209.7	1.00	81.43	0.087	177.8106	0.034199	3.3068	0.006758	97.71155	12.21394
	07-27-2016 02	94	109	1992.2	0.4460	888.5	1.7432	3472.9	204.4	1.00	79.37	0.087	173.3214	0.033336	3.3068	0.006588	95.24462	11.90558
	07-27-2016 03	93	130	2160.2	0.4710	1017.5	1.7578	3797.2	221.6	1.00	86.06	0.087	187.9374	0.036147	3.3068	0.007143	103.2765	12.90956
	07-27-2016 04	101	159	2462.9	0.4660	1147.7	1.7589	4332.1	252.7	1.00	98.12	0.087	214.2723	0.041212	3.3068	0.008144	117.7482	14.71853
	07-27-2016 05	108	160	2547.5	0.4450	1133.6	1.7469	4450.2	261.4	1.00	101.49	0.087	221.6325	0.042627	3.3068	0.008424	121.7928	15.2241
	07-27-2016 06	117	160	2632.8	0.4340	1142.6	1.7422	4586.8	270.1	1.00	104.89	0.087	229.0536	0.044055	3.3068	0.008706	125.8709	15.73386
	07-27-2016 07	117	161	2627.4	0.4420	1161.3	1.7516	4602.2	269.6	1.00	104.68	0.087	228.5838	0.043964	3.3068	0.008688	125.6127	15.70159
	07-27-2016 08	117	164	2654.1	0.4480	1189.0	1.7717	4702.3	272.3	1.00	105.74	0.087	230.9067	0.044411	3.3068	0.008777	126.8892	15.86116
	07-27-2016 09	117	164	2647.4	0.4500	1191.3	1.7790	4709.7	271.6	1.00	105.47	0.087	230.3238	0.044299	3.3068	0.008754	126.5689	15.82112
	07-27-2016 10	117	164	2659.7	0.4460	1186.2	1.7860	4750.2	272.9	1.00	105.96	0.087	231.3939	0.044505	3.3068	0.008795	127.157	15.89462
	07-27-2016 11	117	164	2658.8	0.4500	1196.5	1.7922	4765.0	272.8	1.00	105.93	0.087	231.3156	0.04449	3.3068	0.008792	127.1139	15.88924
	07-27-2016 12	117	163	2674.6	0.4390	1174.1	1.7986	4810.6	274.4	1.00	106.56	0.087	232.6902	0.044754	3.3068	0.008844	127.8693	15.98367
	07-27-2016 13	117	163	2684.8	0.4400	1181.3	1.7996	4831.5	275.5	1.00	106.96	0.087	233.5776	0.044925	3.3068	0.008878	128.357	16.04462
	07-27-2016 14	117	163	2690.6	0.4410	1186.6	1.8076	4863.5	276.1	1.00	107.20	0.087	234.0822	0.045022	3.3068	0.008897	128.6343	16.07928
	07-27-2016 15	119	163	2688.8	0.4400	1183.1	1.8417	4951.9	275.9	1.00	107.12	0.087	233.9256	0.044992	3.3068	0.008891	128.5482	16.06853
	07-27-2016 16	120	113	2393.9	0.3830	916.9	1.7827	4267.7	245.6	1.00	95.37	0.087	208.2693	0.040057	3.3068	0.007916	114.4494	14.30618
	07-27-2016 17	120	55	1805.3	0.3840	693.2	1.7107	3088.4	185.2	1.00	71.92	0.087	157.0611	0.030208	3.3068	0.00597	86.30916	10.78865
	07-27-2016 18	120	0	1122.5	0.4140	464.7	1.7663	1982.7	115.2	1.00	44.72	0.087	97.6575	0.018783	3.3068	0.003712	53.66534	6.708167

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-27-2016 19	120	0	1182.3	0.4020	475.3	1.7556	2075.7	121.3	1.00	47.10	0.087	102.8601	0.019784	3.3068	0.00391	56.5243	7.065538
	07-27-2016 20	118	0	1174.3	0.3940	462.7	1.7661	2073.9	120.5	1.00	46.78	0.087	102.1641	0.01965	3.3068	0.003883	56.14183	7.017729
	07-27-2016 21	115	0	1162.8	0.3870	450.0	1.7629	2049.9	119.3	1.00	46.33	0.087	101.1636	0.019457	3.3068	0.003845	55.59203	6.949004
	07-27-2016 22	115	0	1189.8	0.3770	448.6	1.7775	2114.9	122.1	1.00	47.40	0.087	103.5126	0.019909	3.3068	0.003934	56.88287	7.110359
	07-27-2016 23	115	0	1230.1	0.4240	521.6	1.7910	2203.1	126.2	1.00	49.01	0.087	107.0187	0.020583	3.3068	0.004068	58.80956	7.351195
	07-28-2016 00	116	0	1197.3	0.4200	502.9	1.8107	2167.9	122.8	1.00	47.70	0.087	104.1651	0.020035	3.3068	0.003959	57.24143	7.155179
	07-28-2016 01	115	0	1204.1	0.4140	498.5	1.8047	2173.0	123.5	1.00	47.97	0.087	104.7567	0.020148	3.3068	0.003982	57.56653	7.195817
	07-28-2016 02	114	0	1201.9	0.4160	500.0	1.7956	2158.1	123.3	1.00	47.88	0.087	104.5653	0.020111	3.3068	0.003974	57.46135	7.182669
	07-28-2016 03	116	0	1198.2	0.4220	505.6	1.8151	2174.9	122.9	1.00	47.74	0.087	104.2434	0.02005	3.3068	0.003962	57.28446	7.160558
	07-28-2016 04	115	0	1195.9	0.4270	510.6	1.8040	2157.4	122.7	1.00	47.65	0.087	104.0433	0.020011	3.3068	0.003955	57.1745	7.146813
	07-28-2016 05	115	0	1195.2	0.4270	510.4	1.7812	2128.9	122.6	1.00	47.62	0.087	103.9824	0.019999	3.3068	0.003952	57.14104	7.142629
	07-28-2016 06	109	0	1131.7	0.4250	481.0	1.8037	2041.2	116.1	1.00	45.09	0.087	98.4579	0.018937	3.3068	0.003742	54.10518	6.763147
	07-28-2016 07	114	0	1177.9	0.4120	485.3	1.8073	2128.8	120.8	1.00	46.93	0.087	102.4773	0.01971	3.3068	0.003895	56.31394	7.039243
	07-28-2016 08	114	0	1194.7	0.4200	501.8	1.8104	2162.9	122.6	1.00	47.60	0.087	103.9389	0.019991	3.3068	0.003951	57.11713	7.139641
	07-28-2016 09	113	0	1213.7	0.3940	478.2	1.7974	2181.5	124.5	1.00	48.35	0.087	105.5919	0.020309	3.3068	0.004013	58.0255	7.253187
	07-28-2016 10	113	0	1220.4	0.3910	477.2	1.8079	2206.4	125.2	1.00	48.62	0.087	106.1748	0.020421	3.3068	0.004036	58.34582	7.293227
	07-28-2016 11	112	0	1209.7	0.3920	474.2	1.7977	2174.7	124.1	1.00	48.20	0.087	105.2439	0.020242	3.3068	0.004	57.83426	7.229283
	07-28-2016 12	113	0	1221.1	0.3930	479.9	1.7782	2171.4	125.3	1.00	48.65	0.087	106.2357	0.020433	3.3068	0.004038	58.37928	7.29741
	07-28-2016 13	112	0	1209.2	0.4050	489.7	1.7689	2138.9	124.1	1.00	48.18	0.087	105.2004	0.020234	3.3068	0.003999	57.81036	7.226295
	07-28-2016 14	111	0	1185.0	0.4070	482.3	1.7885	2119.4	121.6	1.00	47.21	0.087	103.095	0.019829	3.3068	0.003919	56.65339	7.081673
	07-28-2016 15	115	0	1226.9	0.4050	496.9	1.7785	2182.0	125.9	1.00	48.88	0.087	106.7403	0.02053	3.3068	0.004057	58.65657	7.332072
	07-28-2016 16	117	0	1242.8	0.4150	515.8	1.7735	2204.1	127.5	1.00	49.51	0.087	108.1236	0.020796	3.3068	0.00411	59.41673	7.427092
	07-28-2016 17	110	0	1154.5	0.4330	499.9	1.7734	2047.4	118.4	1.00	46.00	0.087	100.4415	0.019318	3.3068	0.003818	55.19522	6.899402
	07-28-2016 18	118	0	1216.7	0.3900	474.5	1.8067	2198.2	124.8	1.00	48.47	0.087	105.8529	0.020359	3.3068	0.004023	58.16892	7.271116
	07-28-2016 19	117	0	1236.6	0.3830	473.6	1.7949	2219.6	126.9	1.00	49.27	0.087	107.5842	0.020692	3.3068	0.004089	59.12032	7.390004
	07-28-2016 20	116	0	1235.5	0.3890	480.6	1.8086	2234.5	126.8	1.00	49.22	0.087	107.4885	0.020674	3.3068	0.004086	59.06773	7.383466
	07-28-2016 21	115	0	1235.8	0.3920	484.4	1.7999	2224.3	126.8	1.00	49.24	0.087	107.5146	0.020679	3.3068	0.004087	59.08207	7.385259
	07-28-2016 22	110	0	1176.2	0.4320	508.1	1.7858	2100.4	120.7	1.00	46.86	0.087	102.3294	0.019681	3.3068	0.003889	56.23267	7.029084
	07-28-2016 23	57	0	608.2	0.4020	244.5	1.5537	945.0	62.4	0.90	24.23	0.087	52.91514	0.010177	3.3068	0.002011	29.07825	3.634781
	07-29-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-29-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-29-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-30-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-31-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-31-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-01-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-02-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-02-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-03-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YF01 Gross Load MW Value	YF02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-04-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-04-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-05-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-06-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-06-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-07-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-08-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-08-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-09-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-10-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-10-2016 18	0	0	8.4	0.0000	0.0	0.0000	0.0	0.9	0.63	0.33	0.087	0.728973	0.00014	3.3068	2.77E-05	0.40059	0.050074
	08-10-2016 19	0	0	71.9	0.0195	1.4	0.0000	0.0	7.4	1.00	2.86	0.087	6.2553	0.001203	3.3068	0.000238	3.43745	0.429681
	08-10-2016 20	0	0	116.6	0.0352	4.1	0.0180	2.1	12.0	1.00	4.65	0.087	10.1442	0.001951	3.3068	0.000386	5.574502	0.696813
	08-10-2016 21	0	0	118.9	0.0387	4.6	0.0235	2.8	12.2	1.00	4.74	0.087	10.3443	0.00199	3.3068	0.000393	5.684462	0.710558
	08-10-2016 22	0	0	132.3	0.0370	4.9	0.0385	5.1	13.6	1.00	5.27	0.087	11.5101	0.002214	3.3068	0.000437	6.3251	0.790637
	08-10-2016 23	0	0	138.3	0.0362	5.0	0.0275	3.8	14.2	1.00	5.51	0.087	12.0321	0.002314	3.3068	0.000457	6.611952	0.826494
	08-11-2016 00	0	0	181.4	0.0430	7.8	0.0281	5.1	18.6	1.00	7.23	0.087	15.7818	0.003035	3.3068	0.0006	8.67251	1.084064
	08-11-2016 01	0	0	192.8	0.0430	8.3	0.0316	6.1	19.8	1.00	7.68	0.087	16.7736	0.003226	3.3068	0.000638	9.21753	1.152191
	08-11-2016 02	0	0	194.2	0.0448	8.7	0.0360	7.0	19.9	1.00	7.74	0.087	16.8954	0.00325	3.3068	0.000642	9.284462	1.160558
	08-11-2016 03	0	0	184.7	0.0422	7.8	0.0347	6.4	18.9	1.00	7.36	0.087	16.0689	0.003091	3.3068	0.000611	8.830279	1.103785
	08-11-2016 04	0	0	154.9	0.0368	5.7	0.0336	5.2	15.9	1.00	6.17	0.087	13.4763	0.002592	3.3068	0.000512	7.405578	0.925697
	08-11-2016 05	0	4	238.8	0.1420	33.9	0.3442	82.2	24.5	1.00	9.51	0.087	20.7756	0.003996	3.3068	0.00079	11.41673	1.427092
	08-11-2016 06	0	39	530.7	0.3290	174.6	1.1102	589.2	54.5	1.00	21.14	0.087	46.1709	0.00888	3.3068	0.001755	25.37211	3.171514
	08-11-2016 07	0	88	996.3	0.2990	297.9	1.5885	1582.6	102.2	1.00	39.69	0.087	86.6781	0.016671	3.3068	0.003295	47.63187	5.953984
	08-11-2016 08	0	102	1082.4	0.4770	516.3	1.8106	1959.8	111.0	1.00	43.12	0.087	94.1688	0.018112	3.3068	0.003579	51.74821	6.468526
	08-11-2016 09	0	101	1091.6	0.4740	517.4	1.8455	2014.6	112.0	1.00	43.49	0.087	94.9692	0.018266	3.3068	0.00361	52.18805	6.523506
	08-11-2016 10	0	102	1106.5	0.4690	518.9	1.8446	2041.0	113.5	1.00	44.08	0.087	96.2655	0.018515	3.3068	0.003659	52.9004	6.61255
	08-11-2016 11	0	120	1264.8	0.4690	593.2	1.8382	2324.9	129.8	1.00	50.39	0.087	110.0376	0.021164	3.3068	0.004182	60.46853	7.558566
	08-11-2016 12	0	159	1573.0	0.4810	756.6	1.8503	2910.6	161.4	1.00	62.67	0.087	136.851	0.026321	3.3068	0.005202	75.20319	9.400398
	08-11-2016 13	0	162	1568.9	0.4420	693.5	1.8912	2967.1	161.0	1.00	62.51	0.087	136.4943	0.026253	3.3068	0.005188	75.00717	9.375896
	08-11-2016 14	0	166	1608.7	0.4520	727.1	1.9108	3073.9	165.0	1.00	64.09	0.087	139.9569	0.026918	3.3068	0.00532	76.90996	9.613745
	08-11-2016 15	0	168	1630.4	0.4540	740.2	1.9209	3131.8	167.3	1.00	64.96	0.087	141.8448	0.027282	3.3068	0.005391	77.94741	9.743426
	08-11-2016 16	0	168	1625.1	0.4540	737.8	1.9310	3138.1	166.7	1.00	64.75	0.087	141.3837	0.027193	3.3068	0.005374	77.69402	9.711753
	08-11-2016 17	0	168	1631.5	0.4520	737.4	1.9295	3148.0	167.4	1.00	65.00	0.087	141.9405	0.0273	3.3068	0.005395	78	9.75
	08-11-2016 18	0	168	1635.4	0.4550	744.1	1.9404	3173.4	167.8	1.00	65.16	0.087	142.1798	0.027365	3.3068	0.005408	78.18645	9.773307
	08-11-2016 19	0	167	1638.2	0.4500	737.2	1.9622	3214.4	168.1	1.00	65.27	0.087	142.5234	0.027412	3.3068	0.005417	78.32032	9.79004
	08-11-2016 20	0	168	1649.3	0.4440	732.3	1.9733	3254.5	169.2	1.00	65.71	0.087	143.4891	0.027598	3.3068	0.005454	78.851	9.856375
	08-11-2016 21	0	169	1659.7	0.4500	746.9	1.9553	3245.2	170.3	1.00	66.12	0.087	144.3939	0.027772	3.3068	0.005488	79.34821	9.918526
	08-11-2016 22	0	169	1649.0	0.4550	750.3	1.9503	3216.1	169.2	1.00	65.70	0.087	143.463	0.027593	3.3068	0.005453	78.83665	9.854582
	08-11-2016 23	0	168	1648.0	0.4620	761.4	1.9178	3160.5	169.1	1.00	65.66	0.087	143.376	0.027576	3.3068	0.00545	78.78884	9.848606
	08-12-2016 00	0	146	1464.9	0.4430	649.0	1.8884	2766.3	150.3	1.00	58.36	0.087	127.4463	0.024512	3.3068	0.004844	70.03506	8.754382
	08-12-2016 01	0	111	1191.5	0.3800	452.8	1.8658	2223.1	122.2	1.00	47.47	0.087	103.6605	0.019937	3.3068	0.00394	56.96414	7.120518
	08-12-2016 02	0	102	1124.2	0.3630	408.1	1.8572	2087.9	115.3	1.00	44.79	0.087	97.8054	0.018811	3.3068	0.003717	53.74661	6.718327
	08-12-2016 03	0	98	1115.0	0.3630	404.7	1.8413	2053.0	114.4	1.00	44.42	0.087	97.005	0.018657	3.3068	0.003687	53.30677	6.663347
	08-12-2016 04	0	101	1116.4	0.3750	418.7	1.8508	2066.2	114.5	1.00	44.48	0.087	97.1268	0.018681	3.3068	0.003692	53.37371	6.671713
	08-12-2016 05	0	130	1364.3	0.4610	628.9	1.8510	2525.3	140.0	1.00	54.35	0.087	118.6941	0.022829	3.3068	0.004511	65.2255	8.153187
	08-12-2016 06	0	164	1600.5	0.4810	769.8	1.8818	3011.8	164.2	1.00	63.76	0.087	139.2435	0.026781	3.3068	0.005292	76.51793	9.564741
	08-12-2016 07	0	169	1621.1	0.4760	771.6	1.8998	3079.7	166.3	1.00	64.59	0.087	141.0357	0.027126	3.3068	0.005361	77.50279	9.687849
	08-12-2016 08	0	168	1623.4	0.4600	746.8	1.8915	3070.7	166.6	1.00	64.68	0.087	141.2358	0.027164	3.3068	0.005368	77.61275	9.701594
YTD	08-12-2016 09	0	167	1550.0	0.9930	1550.0	1.9168	2911.2	153.2	1.00	61.77	0.087	134.8848	0.025943	3.3068	0.005127	74.12271	9.265339
	08-12-2016 10	0	167	1489.1	0.4880	726.7	1.9441	2895.0	152.8	1.00	59.33	0.087	129.5517	0.024917	3.3068	0.004924	71.19203	8.899004

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-12-2016 11	0	168	1559.6	0.4930	768.9	1.9667	3067.2	160.0	1.00	62.14	0.087	135.6852	0.026097	3.3068	0.005157	74.56255	9.320319
	08-12-2016 12	0	169	1565.8	0.5190	812.7	2.0074	3143.2	160.7	1.00	62.38	0.087	136.2246	0.026201	3.3068	0.005178	74.85896	9.357371
	08-12-2016 13	0	169	1570.7	0.5230	821.5	2.0098	3156.8	161.2	1.00	62.58	0.087	136.6509	0.026283	3.3068	0.005194	75.09323	9.386653
	08-12-2016 14	0	167	1544.1	0.5290	816.8	2.0362	3144.1	158.4	1.00	61.52	0.087	134.3367	0.025838	3.3068	0.005106	73.82151	9.227689
	08-12-2016 15	0	166	1544.7	0.5440	840.3	2.0004	3090.0	158.5	1.00	61.54	0.087	134.3889	0.025848	3.3068	0.005108	73.8502	9.231275
	08-12-2016 16	0	167	1538.2	0.5440	836.8	1.9787	3043.7	157.8	1.00	61.28	0.087	133.8234	0.025739	3.3068	0.005086	73.53944	9.19243
	08-12-2016 17	0	166	1538.9	0.5470	841.8	1.9561	3010.3	157.9	1.00	61.31	0.087	133.8843	0.025751	3.3068	0.005089	73.57291	9.196614
	08-12-2016 18	0	166	1537.0	0.5450	837.7	1.9314	2968.5	157.7	1.00	61.24	0.087	133.719	0.025719	3.3068	0.005083	73.48207	9.185259
	08-12-2016 19	0	165	1540.0	0.5370	827.0	1.9292	2971.0	158.0	1.00	61.35	0.087	133.98	0.025769	3.3068	0.005092	73.6255	9.203187
	08-12-2016 20	0	165	1544.3	0.5270	813.8	1.9285	2978.2	158.4	1.00	61.53	0.087	134.3541	0.025841	3.3068	0.005107	73.83108	9.228884
	08-12-2016 21	0	165	1533.9	0.5290	811.4	1.9413	2977.7	157.4	1.00	61.11	0.087	133.4493	0.025667	3.3068	0.005072	73.33386	9.166733
	08-12-2016 22	0	163	1531.1	0.5240	802.3	1.9351	2962.9	157.1	1.00	61.00	0.087	133.2057	0.02562	3.3068	0.005063	73.2	9.15
	08-12-2016 23	0	117	1152.4	0.4720	543.9	1.9414	2237.3	118.2	1.00	45.91	0.087	100.2588	0.019283	3.3068	0.003811	55.09482	6.886853
	08-13-2016 00	0	98	1042.9	0.4120	429.7	1.9625	2046.7	107.0	1.00	41.55	0.087	90.7323	0.017451	3.3068	0.003449	49.85976	6.23247
	08-13-2016 01	0	98	1046.5	0.4190	438.5	1.9546	2045.5	107.4	1.00	41.69	0.087	91.0455	0.017511	3.3068	0.003461	50.03187	6.253984
	08-13-2016 02	0	98	1036.8	0.4390	455.2	1.9307	2001.7	106.4	1.00	41.31	0.087	90.2016	0.017349	3.3068	0.003428	49.56813	6.196016
	08-13-2016 03	0	98	1031.8	0.4640	478.8	1.8799	1939.7	105.9	1.00	41.11	0.087	89.7666	0.017265	3.3068	0.003412	49.32908	6.166135
	08-13-2016 04	0	98	1017.3	0.4860	494.4	1.8456	1877.5	104.4	1.00	40.53	0.087	88.5051	0.017023	3.3068	0.003364	48.63586	6.079482
	08-13-2016 05	0	98	1021.6	0.4710	481.2	1.7833	1821.8	104.8	1.00	40.70	0.087	88.8792	0.017095	3.3068	0.003378	48.84143	6.105179
	08-13-2016 06	0	98	1029.6	0.4580	471.6	1.7798	1832.5	105.6	1.00	41.02	0.087	89.5752	0.017228	3.3068	0.003405	49.2239	6.152988
	08-13-2016 07	0	119	1193.7	0.5180	618.3	1.7839	2129.5	122.5	1.00	47.56	0.087	103.8519	0.019974	3.3068	0.003947	57.06932	7.133665
	08-13-2016 08	0	163	1524.6	0.5200	792.8	1.7996	2743.6	156.4	1.00	60.74	0.087	132.6402	0.025511	3.3068	0.005042	72.88924	9.111155
	08-13-2016 09	0	166	1542.9	0.4810	742.1	1.7949	2769.4	158.3	1.00	61.47	0.087	134.2323	0.025817	3.3068	0.005102	73.76414	9.220518
	08-13-2016 10	0	164	1538.2	0.4510	693.7	1.7922	2756.7	157.8	1.00	61.28	0.087	133.8234	0.025739	3.3068	0.005086	73.53944	9.19243
	08-13-2016 11	0	164	1538.7	0.4510	694.0	1.7879	2751.0	157.9	1.00	61.30	0.087	133.8669	0.025747	3.3068	0.005088	73.56335	9.195418
	08-13-2016 12	0	164	1539.4	0.4520	695.8	1.7943	2762.2	157.9	1.00	61.33	0.087	133.9278	0.025759	3.3068	0.00509	73.59681	9.199602
	08-13-2016 13	0	165	1543.5	0.4500	694.6	1.8050	2786.0	158.4	1.00	61.49	0.087	134.2845	0.025827	3.3068	0.005104	73.79283	9.224104
	08-13-2016 14	0	167	1551.5	0.4500	698.2	1.8195	2823.0	159.2	1.00	61.81	0.087	134.9805	0.025961	3.3068	0.00513	74.1753	9.271912
	08-13-2016 15	0	170	1565.3	0.4510	706.0	1.8292	2863.3	160.6	1.00	62.36	0.087	136.1811	0.026192	3.3068	0.005176	74.83506	9.354382
	08-13-2016 16	0	168	1540.8	0.4620	711.8	1.8419	2838.0	158.1	1.00	61.39	0.087	134.0496	0.025782	3.3068	0.005095	73.66375	9.207968
	08-13-2016 17	0	165	1524.5	0.4520	689.1	1.8476	2816.6	156.4	1.00	60.74	0.087	132.6315	0.02551	3.3068	0.005041	72.88446	9.110558
	08-13-2016 18	0	166	1540.6	0.4540	699.4	1.8472	2845.8	158.1	1.00	61.38	0.087	134.0322	0.025779	3.3068	0.005094	73.65418	9.206773
	08-13-2016 19	0	167	1556.5	0.4610	717.5	1.8544	2886.4	159.7	1.00	62.01	0.087	135.4155	0.026045	3.3068	0.005147	74.41434	9.301793
	08-13-2016 20	0	168	1567.7	0.4720	740.0	1.8708	2932.8	160.8	1.00	62.46	0.087	136.3899	0.026232	3.3068	0.005184	74.9498	9.368725
	08-13-2016 21	0	169	1591.0	0.4710	749.4	1.8840	2997.5	163.2	1.00	63.39	0.087	138.417	0.026622	3.3068	0.005261	76.06375	9.507968
	08-13-2016 22	0	171	1604.9	0.4740	760.7	1.9269	3092.5	164.7	1.00	63.94	0.087	139.6263	0.026855	3.3068	0.005307	76.72829	9.591036
	08-13-2016 23	0	127	1241.8	0.4340	538.9	1.9480	2419.0	127.4	1.00	49.47	0.087	108.0366	0.020779	3.3068	0.004106	59.36892	7.421116
	08-14-2016 00	0	98	1069.0	0.3610	385.9	1.9558	2090.8	109.7	1.00	42.59	0.087	93.003	0.017888	3.3068	0.003535	51.10757	6.388446
	08-14-2016 01	0	98	1063.6	0.3850	409.5	1.9535	2077.7	109.1	1.00	42.37	0.087	92.5332	0.017797	3.3068	0.003517	50.8494	6.356175
	08-14-2016 02	0	98	1055.5	0.4100	432.8	1.9272	2034.2	108.3	1.00	42.05	0.087	91.8285	0.017662	3.3068	0.00349	50.46215	6.307769
	08-14-2016 03	0	98	1035.1	0.4410	456.5	1.9261	1993.7	106.2	1.00	41.24	0.087	90.0537	0.01732	3.3068	0.003423	49.48685	6.185857
	08-14-2016 04	0	98	1036.9	0.4470	463.5	1.9255	1996.5	106.4	1.00	41.31	0.087	90.2103	0.017351	3.3068	0.003429	49.57291	6.196614
	08-14-2016 05	0	98	1029.2	0.4560	469.3	1.8960	1951.4	105.6	1.00	41.00	0.087	89.5404	0.017222	3.3068	0.003403	49.20478	6.150598
	08-14-2016 06	0	98	1028.6	0.4510	463.9	1.9108	1965.5	105.5	1.00	40.98	0.087	89.4882	0.017212	3.3068	0.003401	49.1761	6.147012
	08-14-2016 07	0	107	1103.7	0.4500	496.7	1.9141	2112.6	113.2	1.00	43.97	0.087	96.0219	0.018468	3.3068	0.00365	52.76653	6.595817
	08-14-2016 08	0	141	1376.7	0.4930	678.7	1.8897	2601.6	141.2	1.00	54.85	0.087	119.7729	0.023036	3.3068	0.004552	65.81833	8.227291
	08-14-2016 09	0	168	1558.4	0.5110	796.3	1.8934	2950.7	159.9	1.00	62.09	0.087	135.5808	0.026077	3.3068	0.005153	74.50518	9.313147

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-14-2016 10	0	168	1567.5	0.4620	724.2	1.8852	2955.0	160.8	1.00	62.45	0.087	136.3725	0.026229	3.3068	0.005183	74.94024	9.36753
	08-14-2016 11	0	169	1572.8	0.4680	736.1	1.8809	2958.3	161.4	1.00	62.66	0.087	136.8336	0.026318	3.3068	0.005201	75.19363	9.399203
	08-14-2016 12	0	169	1556.8	0.4930	767.5	1.8664	2905.6	159.7	1.00	62.02	0.087	135.4416	0.02605	3.3068	0.005148	74.42869	9.303586
	08-14-2016 13	0	169	1557.8	0.4760	741.5	1.8531	2886.8	159.8	1.00	62.06	0.087	135.5286	0.026067	3.3068	0.005151	74.47649	9.309562
	08-14-2016 14	0	167	1545.9	0.4780	738.9	1.8304	2829.6	158.6	1.00	61.59	0.087	134.4933	0.025868	3.3068	0.005112	73.90757	9.238446
	08-14-2016 15	0	169	1565.4	0.4620	723.2	1.8236	2854.6	160.6	1.00	62.37	0.087	136.1898	0.026194	3.3068	0.005176	74.83984	9.35498
	08-14-2016 16	0	171	1561.5	0.4770	744.8	1.7962	2804.8	160.2	1.00	62.21	0.087	135.8505	0.026129	3.3068	0.005164	74.65339	9.331673
	08-14-2016 17	0	170	1564.3	0.4720	738.3	1.7543	2744.2	160.5	1.00	62.32	0.087	136.0941	0.026176	3.3068	0.005173	74.78725	9.348406
	08-14-2016 18	0	170	1554.5	0.5020	780.4	1.7563	2730.2	159.5	1.00	61.93	0.087	135.2415	0.026012	3.3068	0.00514	74.31873	9.289841
	08-14-2016 19	0	169	1553.6	0.5230	812.5	1.7324	2691.5	159.4	1.00	61.90	0.087	135.1632	0.025996	3.3068	0.005137	74.2757	9.284462
	08-14-2016 20	0	169	1565.0	0.5070	793.5	1.7158	2685.2	160.6	1.00	62.35	0.087	136.155	0.026187	3.3068	0.005175	74.82072	9.35259
	08-14-2016 21	0	161	1514.4	0.5170	782.9	1.6911	2561.0	155.4	1.00	60.33	0.087	131.7528	0.025341	3.3068	0.005008	72.40159	9.050199
	08-14-2016 22	0	111	1133.0	0.4600	521.2	1.6653	1886.8	116.2	1.00	45.14	0.087	98.571	0.018959	3.3068	0.003747	60.770916	6.770916
	08-14-2016 23	0	98	1059.6	0.4450	471.5	1.6549	1753.5	108.7	1.00	42.22	0.087	92.1852	0.01773	3.3068	0.003504	50.65817	6.332271
	08-15-2016 00	0	98	1068.9	0.4440	474.6	1.6538	1767.7	109.7	1.00	42.59	0.087	92.9943	0.017886	3.3068	0.003535	51.10279	6.387849
	08-15-2016 01	0	98	1066.2	0.4700	501.1	1.6357	1744.0	109.4	1.00	42.48	0.087	92.7594	0.017841	3.3068	0.003526	50.97371	6.371713
	08-15-2016 02	0	98	1031.7	0.5030	518.9	1.6243	1675.8	105.9	1.00	41.10	0.087	89.7579	0.017264	3.3068	0.003412	49.3243	6.165538
	08-15-2016 03	0	98	1025.5	0.5190	532.2	1.6267	1668.2	105.2	1.00	40.86	0.087	89.2185	0.01716	3.3068	0.003391	49.02789	6.128486
	08-15-2016 04	0	98	1023.9	0.5210	533.5	1.6226	1661.4	105.1	1.00	40.79	0.087	89.0793	0.017133	3.3068	0.003386	48.95139	6.118924
	08-15-2016 05	0	98	1032.3	0.5070	523.4	1.5897	1641.0	105.9	1.00	41.13	0.087	89.8101	0.017274	3.3068	0.003414	49.35299	6.169124
	08-15-2016 06	0	98	1027.4	0.5140	528.1	1.5919	1635.5	105.4	1.00	40.93	0.087	89.3838	0.017192	3.3068	0.003397	49.11873	6.139841
	08-15-2016 07	0	98	1022.0	0.5280	539.6	1.6025	1637.8	104.9	1.00	40.72	0.087	88.914	0.017101	3.3068	0.00338	48.86056	6.10757
	08-15-2016 08	0	103	1065.0	0.5140	547.4	1.5969	1700.7	109.3	1.00	42.43	0.087	92.655	0.017821	3.3068	0.003522	50.91633	6.364542
	08-15-2016 09	0	141	1363.1	0.5540	755.2	1.6149	2201.3	139.9	1.00	54.31	0.087	118.5897	0.022809	3.3068	0.004507	65.16813	8.146016
	08-15-2016 10	0	166	1541.5	0.5380	829.3	1.6280	2509.6	158.2	1.00	61.41	0.087	134.1105	0.025794	3.3068	0.005097	73.69721	9.212151
	08-15-2016 11	0	161	1512.9	0.5540	838.1	1.6217	2453.4	155.2	1.00	60.27	0.087	131.6223	0.025315	3.3068	0.005003	72.32988	9.041235
	08-15-2016 12	0	160	1501.2	0.5110	767.1	1.6414	2464.1	154.0	1.00	59.81	0.087	130.6044	0.02512	3.3068	0.004964	71.77052	8.971315
	08-15-2016 13	0	160	1495.4	0.5000	747.7	1.6666	2492.2	153.4	1.00	59.58	0.087	130.0998	0.025023	3.3068	0.004945	71.49323	8.936653
	08-15-2016 14	0	160	1516.0	0.4910	744.4	1.6739	2537.6	155.5	1.00	60.40	0.087	131.892	0.025367	3.3068	0.005013	72.47809	9.059761
	08-15-2016 15	0	160	1512.7	0.4850	733.7	1.7089	2585.0	155.2	1.00	60.27	0.087	131.6049	0.025312	3.3068	0.005002	72.32032	9.04004
	08-15-2016 16	0	160	1503.7	0.4930	741.3	1.7312	2603.2	154.3	1.00	59.91	0.087	130.8219	0.025162	3.3068	0.004972	71.89004	8.986255
	08-15-2016 17	0	160	1512.2	0.4920	744.0	1.7394	2630.3	155.2	1.00	60.25	0.087	131.5614	0.025304	3.3068	0.005001	72.29641	9.037052
	08-15-2016 18	0	160	1494.8	0.5020	750.4	1.7722	2649.1	153.4	1.00	59.55	0.087	130.0476	0.025013	3.3068	0.004943	71.46454	8.933068
	08-15-2016 19	0	160	1503.5	0.5060	760.8	1.7909	2692.6	154.3	1.00	59.90	0.087	130.8045	0.025158	3.3068	0.004972	71.88048	8.98506
	08-15-2016 20	0	160	1505.2	0.5100	767.7	1.7992	2708.1	154.4	1.00	59.97	0.087	130.9524	0.025187	3.3068	0.004977	71.96175	8.995219
	08-15-2016 21	0	156	1477.1	0.5170	763.7	1.8318	2705.7	151.6	1.00	58.85	0.087	128.5077	0.024716	3.3068	0.004884	70.61833	8.827291
	08-15-2016 22	0	127	1256.5	0.4560	573.0	1.8789	2360.9	128.9	1.00	50.06	0.087	109.3155	0.021025	3.3068	0.004155	60.07171	7.508964
	08-15-2016 23	0	99	1062.4	0.4560	484.5	1.8682	1984.8	109.0	1.00	42.33	0.087	92.4288	0.017777	3.3068	0.003513	50.79203	6.349004
	08-16-2016 00	0	98	1059.8	0.4690	497.0	1.8870	1999.8	108.7	1.00	42.22	0.087	92.2026	0.017734	3.3068	0.003505	50.66773	6.333466
	08-16-2016 01	0	98	1038.8	0.4890	508.0	1.8862	1959.4	106.6	1.00	41.39	0.087	90.3756	0.017382	3.3068	0.003435	49.66375	6.207968
	08-16-2016 02	0	98	1035.1	0.5030	520.7	1.8749	1940.7	106.2	1.00	41.24	0.087	90.0537	0.01732	3.3068	0.003423	49.48685	6.185857
	08-16-2016 03	0	98	1021.7	0.5180	529.2	1.8813	1922.1	104.8	1.00	40.71	0.087	88.8879	0.017096	3.3068	0.003379	48.84622	6.105777
	08-16-2016 04	0	98	1026.4	0.5210	534.8	1.8781	1927.7	105.3	1.00	40.89	0.087	89.2968	0.017175	3.3068	0.003394	49.07092	6.133865
	08-16-2016 05	0	98	1032.8	0.5200	537.1	1.8518	1912.5	106.0	1.00	41.15	0.087	89.8536	0.017282	3.3068	0.003415	49.37689	6.172112
	08-16-2016 06	0	98	1018.7	0.5070	516.5	1.8805	1915.7	104.5	1.00	40.59	0.087	88.6269	0.017046	3.3068	0.003369	48.70279	6.087849
	08-16-2016 07	0	103	1064.1	0.4410	469.3	1.9000	2021.8	109.2	1.00	42.39	0.087	92.5767	0.017806	3.3068	0.003519	50.87331	6.359163
	08-16-2016 08	0	119	1194.3	0.5430	648.5	1.9092	2280.2	122.5	1.00	47.58	0.087	103.9041	0.019984	3.3068	0.003949	57.09801	7.137251

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/Hr)	HCl (lb/hr)	HF (lb/hr)
	08-16-2016 09	0	146	1406.7	0.5730	806.0	1.8947	2665.3	144.3	1.00	56.04	0.087	122.3829	0.023538	3.3068	0.004652	67.25259	8.406574
	08-16-2016 10	0	160	1486.2	0.5400	802.5	1.9046	2830.6	152.5	1.00	59.21	0.087	129.2994	0.024869	3.3068	0.004915	71.05339	8.881673
	08-16-2016 11	0	160	1506.8	0.4800	723.3	1.9401	2923.3	154.6	1.00	60.03	0.087	131.0916	0.025213	3.3068	0.004983	72.03825	9.004781
	08-16-2016 12	0	161	1515.1	0.4740	718.2	1.9454	2947.4	155.5	1.00	60.36	0.087	131.8137	0.025352	3.3068	0.00501	72.43506	9.054382
	08-16-2016 13	0	161	1504.0	0.4800	721.9	1.9403	2918.2	154.3	1.00	59.92	0.087	130.848	0.025167	3.3068	0.004973	71.90438	8.988048
	08-16-2016 14	0	161	1493.9	0.5290	790.3	1.9513	2915.0	153.3	1.00	59.52	0.087	129.9693	0.024998	3.3068	0.00494	71.42151	8.927689
	08-16-2016 15	0	160	1505.9	0.5090	766.5	1.9207	2892.4	154.5	1.00	60.00	0.087	131.0133	0.025198	3.3068	0.00498	71.99522	8.999402
	08-16-2016 16	0	161	1505.5	0.4990	751.2	1.9313	2907.5	154.5	1.00	59.98	0.087	130.9785	0.025192	3.3068	0.004978	71.9761	8.997012
	08-16-2016 17	0	160	1496.7	0.5080	760.3	1.9328	2892.8	153.6	1.00	59.63	0.087	130.2129	0.025044	3.3068	0.004949	71.55538	8.944422
	08-16-2016 18	0	161	1494.8	0.5150	769.8	1.9278	2881.7	153.4	1.00	59.55	0.087	130.0476	0.025013	3.3068	0.004943	71.46454	8.933068
	08-16-2016 19	0	161	1510.5	0.5160	779.4	1.9334	2920.4	155.0	1.00	60.18	0.087	131.4135	0.025275	3.3068	0.004995	72.21514	9.026892
	08-16-2016 20	0	160	1508.1	0.5190	782.7	1.9448	2932.9	154.7	1.00	60.08	0.087	131.2047	0.025235	3.3068	0.004987	72.1004	9.01255
	08-16-2016 21	0	120	1198.5	0.5110	612.4	1.9412	2326.5	123.0	1.00	47.75	0.087	104.2695	0.020055	3.3068	0.003963	57.2988	7.162351
	08-16-2016 22	0	109	1118.8	0.5510	616.5	1.9306	2159.9	114.8	1.00	44.57	0.087	97.3356	0.018721	3.3068	0.0037	53.48845	6.686056
	08-16-2016 23	0	99	1056.0	0.5050	533.3	1.9438	2052.6	108.4	1.00	42.07	0.087	91.872	0.01767	3.3068	0.003492	50.48606	6.310757
	08-17-2016 00	0	95	1020.1	0.5030	513.1	1.9252	1963.9	104.7	1.00	40.64	0.087	88.7487	0.017069	3.3068	0.003373	48.76972	6.096215
	08-17-2016 01	0	98	1043.4	0.4950	516.5	1.9262	2009.8	107.1	1.00	41.57	0.087	90.7758	0.017459	3.3068	0.00345	49.88367	6.235458
	08-17-2016 02	0	99	1037.2	0.4970	515.5	1.9116	1982.7	106.4	1.00	41.32	0.087	90.2364	0.017356	3.3068	0.00343	49.58725	6.198406
	08-17-2016 03	0	99	1040.4	0.4940	514.0	1.8738	1949.5	106.7	1.00	41.45	0.087	90.5148	0.017409	3.3068	0.00344	49.74024	6.21753
	08-17-2016 04	0	98	1029.4	0.5140	529.1	1.9116	1967.8	105.6	1.00	41.01	0.087	89.5578	0.017225	3.3068	0.003404	49.21434	6.151793
	08-17-2016 05	0	110	1129.4	0.5410	611.0	1.9178	2166.0	115.9	1.00	45.00	0.087	98.2578	0.018898	3.3068	0.003735	53.99522	6.749402
	08-17-2016 06	0	137	1324.9	0.5800	768.4	1.9221	2546.6	135.9	1.00	52.78	0.087	115.2663	0.02217	3.3068	0.004381	63.34183	7.917729
	08-17-2016 07	0	155	1451.7	0.6040	876.8	1.9200	2787.2	148.9	1.00	57.84	0.087	126.2979	0.024291	3.3068	0.0048	69.40398	8.675498
	08-17-2016 08	0	162	1522.6	0.5730	872.4	1.8949	2885.2	156.2	1.00	60.66	0.087	132.4662	0.025478	3.3068	0.005035	72.79363	9.099203
	08-17-2016 09	0	166	1541.0	0.5310	818.3	1.9012	2929.7	158.1	1.00	61.39	0.087	134.067	0.025786	3.3068	0.005096	73.67331	9.209163
	08-17-2016 10	0	167	1568.9	0.4850	760.9	1.9076	2992.9	161.0	1.00	62.51	0.087	136.4943	0.026253	3.3068	0.005188	75.00717	9.375896
	08-17-2016 11	0	167	1566.3	0.5080	795.7	1.8974	2971.9	160.7	1.00	62.40	0.087	136.2681	0.026209	3.3068	0.005179	74.88287	9.360359
	08-17-2016 12	0	167	1574.6	0.5210	820.4	1.8765	2954.8	161.6	1.00	62.73	0.087	136.9902	0.026348	3.3068	0.005207	75.27968	9.40996
	08-17-2016 13	0	167	1568.7	0.5210	817.3	1.8707	2934.5	161.0	1.00	62.50	0.087	136.4769	0.026249	3.3068	0.005187	74.99761	9.374701
	08-17-2016 14	0	167	1557.6	0.4880	760.1	1.8928	2948.3	159.8	1.00	62.06	0.087	135.5112	0.026063	3.3068	0.005151	74.46693	9.308367
	08-17-2016 15	0	167	1558.3	0.4870	758.9	1.8889	2943.5	159.9	1.00	62.08	0.087	135.5721	0.026075	3.3068	0.005153	74.5004	9.31255
	08-17-2016 16	0	167	1557.7	0.4890	761.7	1.8867	2938.9	159.8	1.00	62.06	0.087	135.5199	0.026065	3.3068	0.005151	74.47171	9.308964
	08-17-2016 17	0	167	1560.0	0.4890	762.8	1.8856	2941.5	160.1	1.00	62.15	0.087	135.72	0.026104	3.3068	0.005159	74.58167	9.322709
	08-17-2016 18	0	154	1470.2	0.5000	735.1	1.8668	2744.5	150.8	1.00	58.57	0.087	127.9074	0.024601	3.3068	0.004862	70.28845	8.786056
	08-17-2016 19	0	154	1471.6	0.5020	738.7	1.7300	2545.9	151.0	1.00	58.63	0.087	128.0292	0.024624	3.3068	0.004866	70.35538	8.794422
	08-17-2016 20	0	152	1415.9	0.5650	800.0	1.7039	2412.5	145.3	1.00	56.41	0.087	123.1833	0.023692	3.3068	0.004682	67.69243	8.461554
	08-17-2016 21	0	145	1379.6	0.4980	687.0	1.7209	2374.2	141.5	1.00	54.96	0.087	120.0252	0.023085	3.3068	0.004562	65.95697	8.244622
	08-17-2016 22	0	132	1282.8	0.3440	441.3	1.7283	2217.0	131.6	1.00	51.11	0.087	111.6036	0.021465	3.3068	0.004242	61.32908	7.666135
	08-17-2016 23	0	118	1162.2	0.3300	383.5	1.6690	1939.7	119.2	1.00	46.30	0.087	101.1114	0.019447	3.3068	0.003843	55.56335	6.945418
	08-18-2016 00	0	59	679.6	0.3150	214.1	1.4965	1017.0	69.7	1.00	27.08	0.087	59.1252	0.011372	3.3068	0.002247	32.49084	4.061355
	08-18-2016 01	0	46	606.3	0.3330	201.9	1.4310	867.6	62.2	1.00	24.16	0.087	52.7481	0.010145	3.3068	0.002005	28.98645	3.623307
	08-18-2016 02	0	49	601.4	0.2800	168.4	1.4147	850.8	61.7	1.00	23.96	0.087	52.3218	0.010063	3.3068	0.001989	28.75219	3.594024
	08-18-2016 03	0	0	29.0	0.2879	8.4	1.3892	40.3	3.0	0.07	1.16	0.087	2.525523	0.000486	3.3068	9.6E-05	1.387841	0.17348
	08-18-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/Hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-18-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-18-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-19-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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	08-20-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-20-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-21-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-22-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-22-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-23-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-24-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-24-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-25-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.40	0.02	0.087	0.0348	6.69E-06	3.3068	1.32E-06	0.019124	0.00239
	08-25-2016 15	0	0	0.9	0.0000	0.0	0.0000	0.0	0.1	0.10	0.04	0.087	0.07743	1.49E-05	3.3068	2.94E-06	0.04255	0.005319
	08-25-2016 16	0	0	60.9	0.0148	0.9	0.0000	0.0	6.3	1.00	2.43	0.087	5.2983	0.001019	3.3068	0.000201	2.911554	0.363944
	08-25-2016 17	0	0	77.0	0.0260	2.0	0.0000	0.0	7.9	1.00	3.07	0.087	6.699	0.001288	3.3068	0.000255	3.681275	0.460159
	08-25-2016 18	0	0	91.6	0.0338	3.1	0.0000	0.0	9.4	1.00	3.65	0.087	7.9692	0.001533	3.3068	0.000303	4.379283	0.54741
	08-25-2016 19	0	0	93.0	0.0398	3.7	0.0000	0.0	9.5	1.00	3.71	0.087	8.091	0.001556	3.3068	0.000308	4.446215	0.555777
	08-25-2016 20	0	0	92.8	0.0474	4.4	0.0000	0.0	9.5	1.00	3.70	0.087	8.0736	0.001553	3.3068	0.000307	4.436653	0.554582
	08-25-2016 21	0	0	80.5	0.0435	3.5	0.0000	0.0	8.3	1.00	3.21	0.087	7.0035	0.001347	3.3068	0.000266	3.848606	0.481076
	08-25-2016 22	0	0	91.3	0.0438	4.0	0.0000	0.0	9.4	1.00	3.64	0.087	7.9431	0.001528	3.3068	0.000302	4.36494	0.545618
	08-25-2016 23	0	0	68.1	0.0396	2.7	0.0000	0.0	7.0	1.00	2.71	0.087	5.9247	0.00114	3.3068	0.000225	3.255777	0.406972
	08-26-2016 00	0	0	68.0	0.0368	2.5	0.0000	0.0	7.0	1.00	2.71	0.087	5.916	0.001138	3.3068	0.000225	3.250996	0.406375
	08-26-2016 01	0	0	68.4	0.0365	2.5	0.0000	0.0	7.0	1.00	2.73	0.087	5.9508	0.001145	3.3068	0.000226	3.27012	0.408765
	08-26-2016 02	0	0	67.9	0.0383	2.6	0.0000	0.0	7.0	1.00	2.71	0.087	5.9073	0.001136	3.3068	0.000225	3.246215	0.405777
	08-26-2016 03	0	0	83.9	0.0369	3.1	0.0000	0.0	8.6	1.00	3.34	0.087	7.2993	0.001404	3.3068	0.000277	4.011155	0.501394

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Subs. Period Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
TRUE	08-26-2016 04	3	0	138.9	0.0547	7.6	0.0000	0.0	14.3	1.00	5.53	0.087	12.0843	0.002324	3.3068	0.000459	6.640637	0.83008
	08-26-2016 05	30	0	558.4	0.3320	185.4	1.3634	761.3	57.3	1.00	22.25	0.087	48.5808	0.009344	3.3068	0.001847	26.69641	3.337052
	08-26-2016 06	69	0	873.5	0.2509	219.2	1.6009	1398.4	89.6	1.00	34.80	0.087	75.9945	0.014616	3.3068	0.002888	41.76096	5.22012
	08-26-2016 07	113	0	1258.0	0.3350	421.4	1.7562	2209.3	129.1	1.00	50.12	0.087	109.446	0.02105	3.3068	0.00416	60.14343	7.517928
	08-26-2016 08	134	0	1364.7	0.3960	540.4	1.8195	2483.1	140.0	1.00	54.37	0.087	118.7289	0.022836	3.3068	0.004513	65.24462	8.155578
	08-26-2016 09	147	0	1454.5	0.9930	1424.5	1.7803	2555.9	147.2	1.00	57.15	0.087	124.8015	0.024004	3.3068	0.004744	68.58167	8.572709
	08-26-2016 10	156	0	1446.8	0.3850	557.0	1.7599	2546.2	148.4	1.00	57.64	0.087	125.8716	0.024209	3.3068	0.004784	69.16972	8.646215
	08-26-2016 11	159	0	1533.6	0.3710	569.0	1.7706	2715.4	157.3	1.00	61.10	0.087	133.4232	0.025662	3.3068	0.005071	73.31952	9.16494
	08-26-2016 12	160	0	1547.9	0.3540	548.0	1.7862	2764.9	158.8	1.00	61.67	0.087	134.6673	0.025901	3.3068	0.005119	74.00319	9.250398
	08-26-2016 13	157	0	1560.7	0.3700	577.5	1.7725	2766.3	160.1	1.00	62.18	0.087	135.7809	0.026115	3.3068	0.005161	74.61514	9.326892
	08-26-2016 14	158	0	1584.3	0.3740	592.5	1.7736	2809.9	162.5	1.00	63.12	0.087	137.8341	0.02651	3.3068	0.005239	75.74343	9.467928
	08-26-2016 15	158	0	1582.4	0.3770	596.6	1.7804	2817.3	162.4	1.00	63.04	0.087	137.6688	0.026478	3.3068	0.005233	75.65259	9.456574
	08-26-2016 16	160	0	1588.4	0.3750	595.7	1.7922	2846.7	163.0	1.00	63.28	0.087	138.1908	0.026579	3.3068	0.005252	75.93944	9.49243
	08-26-2016 17	158	0	1561.6	0.3940	615.3	1.7946	2802.4	160.2	1.00	62.22	0.087	135.8592	0.02613	3.3068	0.005164	74.65817	9.332271
	08-26-2016 18	157	0	1566.9	0.3990	625.2	1.7986	2818.2	160.8	1.00	62.43	0.087	136.3203	0.026219	3.3068	0.005181	74.91155	9.363944
	08-26-2016 19	157	0	1571.2	0.3910	614.3	1.8112	2845.7	161.2	1.00	62.60	0.087	136.6944	0.026291	3.3068	0.005196	75.11713	9.389641
	08-26-2016 20	154	0	1544.8	0.4100	633.4	1.8197	2811.1	158.5	1.00	61.55	0.087	134.3976	0.025849	3.3068	0.005108	73.85498	9.231873
	08-26-2016 21	151	0	1500.7	0.4140	621.3	1.8280	2743.3	154.0	1.00	59.79	0.087	130.5609	0.025111	3.3068	0.004962	71.74661	8.968327
	08-26-2016 22	123	0	1256.2	0.2770	348.0	1.7584	2208.9	128.9	1.00	50.05	0.087	109.2894	0.02102	3.3068	0.004154	60.05737	7.507171
	08-26-2016 23	125	0	1304.5	0.2660	347.0	1.6892	2203.5	133.8	1.00	51.97	0.087	113.4915	0.021828	3.3068	0.004314	62.36653	7.795817
	08-27-2016 00	128	0	1316.0	0.2690	354.0	1.6733	2202.0	135.0	1.00	52.43	0.087	114.492	0.022021	3.3068	0.004352	62.91633	7.864542
	08-27-2016 01	104	0	1075.8	0.2240	241.0	1.5683	1687.2	110.4	1.00	42.86	0.087	93.5946	0.018001	3.3068	0.003557	51.43267	6.429084
	08-27-2016 02	98	0	1054.7	0.1960	206.7	1.4714	1551.9	108.2	1.00	42.02	0.087	91.7589	0.017648	3.3068	0.003488	50.4239	6.302988
08-27-2016 03	75	0	837.2	0.1930	161.6	1.3403	1122.1	85.9	1.00	33.35	0.087	72.8364	0.014009	3.3068	0.002768	40.0255	5.003187	
08-27-2016 04	56	0	689.5	0.1830	126.2	1.2699	875.6	70.7	0.90	27.47	0.087	59.98563	0.011537	3.3068	0.00228	32.96367	4.120458	
08-27-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-27-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-28-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-28-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	
08-28-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.00	0.087	0	0	0.0000	0	0	

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-28-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-28-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-29-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-30-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-30-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	08-31-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-01-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-01-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-02-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-03-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-03-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-04-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-04-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-05-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-06-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-06-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-07-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
TRUE	09-07-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.02	0.00	0.087	0.00174	3.35E-07	3.3068	6.61E-08	0.000956	0.00012
TRUE	09-07-2016 12	0	0	1.0	0.0000	0.0	0.0000	0.0	0.0	1.00	0.04	0.087	0.087	1.67E-05	3.3068	3.31E-06	0.047809	0.005976
	09-07-2016 13	0	0	205.2	0.2641	54.2	1.2027	246.8	21.1	1.00	8.18	0.087	17.8524	0.003434	3.3068	0.000679	9.810359	1.226295
	09-07-2016 14	0	0	5.4	0.0000	0.0	0.0000	0.0	0.6	1.00	0.22	0.087	0.4698	9.04E-05	3.3068	1.79E-05	0.258167	0.032271
	09-07-2016 15	0	0	57.2	0.0175	1.0	0.0000	0.0	5.9	1.00	2.28	0.087	4.9764	0.000957	3.3068	0.000189	2.734661	0.341833
	09-07-2016 16	0	0	40.9	0.0171	0.7	0.0220	0.9	4.2	1.00	1.63	0.087	3.5583	0.000684	3.3068	0.000135	1.955378	0.244422
	09-07-2016 17	0	0	42.6	0.0164	0.7	0.0352	1.5	4.4	1.00	1.70	0.087	3.7062	0.000713	3.3068	0.000141	2.036653	0.254582
	09-07-2016 18	0	0	44.2	0.0181	0.8	0.0520	2.3	4.5	1.00	1.76	0.087	3.8454	0.00074	3.3068	0.000146	2.113147	0.264143
	09-07-2016 19	0	0	51.7	0.0193	1.0	0.0484	2.5	5.3	1.00	2.06	0.087	4.4979	0.000865	3.3068	0.000171	2.471713	0.308964
	09-07-2016 20	0	0	52.4	0.0191	1.0	0.0477	2.5	5.4	1.00	2.09	0.087	4.5588	0.000877	3.3068	0.000173	2.505179	0.313147
	09-07-2016 21	0	0	66.2	0.0257	1.7	0.0544	3.6	6.8	1.00	2.64	0.087	5.7594	0.001108	3.3068	0.000219	3.16494	0.395618
	09-07-2016 22	0	0	110.2	0.0399	4.4	0.0581	6.4	11.3	1.00	4.39	0.087	9.5874	0.001844	3.3068	0.000364	5.268526	0.658566
	09-07-2016 23	0	0	108.1	0.0398	4.3	0.0555	6.0	11.1	1.00	4.31	0.087	9.4047	0.001809	3.3068	0.000357	5.168127	0.646016
	09-08-2016 00	0	0	99.8	0.0371	3.7	0.0491	4.9	10.2	1.00	3.98	0.087	8.6826	0.00167	3.3068	0.00033	4.771315	0.596414
	09-08-2016 01	0	0	106.6	0.0394	4.2	0.0497	5.3	10.9	1.00	4.25	0.087	9.2742	0.001784	3.3068	0.000353	5.096414	0.637052
	09-08-2016 02	0	0	113.8	0.0404	4.6	0.0501	5.7	11.7	1.00	4.53	0.087	9.9006	0.001904	3.3068	0.000376	5.440637	0.68008
	09-08-2016 03	0	0	121.5	0.0412	5.0	0.0510	6.2	12.5	1.00	4.84	0.087	10.5705	0.002033	3.3068	0.000402	5.808765	0.726096
	09-08-2016 04	0	0	144.5	0.0491	7.1	0.0540	7.8	14.8	1.00	5.76	0.087	12.5715	0.002418	3.3068	0.000478	6.908367	0.863546
	09-08-2016 05	0	0	129.2	0.0472	6.1	0.0550	7.1	13.3	1.00	5.15	0.087	11.2404	0.002162	3.3068	0.000427	6.176892	0.772112
	09-08-2016 06	0	0	137.4	0.0393	5.4	0.0699	9.6	14.1	1.00	5.47	0.087	11.9538	0.002299	3.3068	0.000454	6.568924	0.821116
	09-08-2016 07	0	0	165.1	0.0430	7.1	0.0600	9.9	16.9	1.00	6.58	0.087	14.3637	0.002763	3.3068	0.000546	7.893227	0.986653
	09-08-2016 08	0	5	233.9	0.1761	41.2	0.5438	127.2	24.0	1.00	9.32	0.087	20.3493	0.003914	3.3068	0.000773	11.18247	1.397809
	09-08-2016 09	0	22	393.7	0.3589	141.3	1.1346	446.7	40.4	1.00	15.69	0.087	34.2519	0.006588	3.3068	0.001302	18.82231	2.352789
	09-08-2016 10	0	70	752.0	0.3170	238.4	1.5274	1148.6	77.2	1.00	29.96	0.087	65.424	0.012583	3.3068	0.002487	35.95219	4.494024
	09-08-2016 11	0	104	1063.5	0.4170	443.5	1.8420	1959.0	109.1	1.00	42.37	0.087	92.5245	0.017796	3.3068	0.003517	50.84462	6.355578
	09-08-2016 12	0	146	1383.6	0.4950	684.9	1.8681	2584.7	142.0	1.00	55.12	0.087	120.3732	0.023152	3.3068	0.004575	66.14821	8.268526
	09-08-2016 13	0	168	1565.7	0.4740	742.1	1.9068	2985.4	160.6	1.00	62.38	0.087	136.2159	0.026199	3.3068	0.005177	74.85418	9.356773
	09-08-2016 14	0	171	1670.2	0.4180	698.1	1.9405	3241.1	171.4	1.00	66.54	0.087	145.3074	0.027948	3.3068	0.005523	79.8502	9.981275
	09-08-2016 15	0	170	1680.4	0.4200	705.8	1.9645	3301.1	172.4	1.00	66.95	0.087	146.1948	0.028118	3.3068	0.005557	80.33785	10.04223
	09-08-2016 16	0	169	1652.9	0.4260	704.1	1.9773	3268.2	169.6	1.00	65.85	0.087	143.8023	0.027658	3.3068	0.005466	79.02311	9.877888
	09-08-2016 17	0	169	1660.6	0.4200	697.5	1.9730	3276.3	170.4	1.00	66.16	0.087	144.4722	0.027787	3.3068	0.005491	79.39124	9.923904
	09-08-2016 18	0	169	1652.7	0.4220	697.4	1.9750	3264.1	169.6	1.00	65.84	0.087	143.7849	0.027655	3.3068	0.005465	79.01355	9.876693
	09-08-2016 19	0	169	1656.6	0.4100	679.2	1.9361	3207.3	170.0	1.00	66.00	0.087	144.1242	0.02772	3.3068	0.005478	79.2	9.9
	09-08-2016 20	0	168	1645.0	0.4040	664.6	1.9111	3143.8	168.8	1.00	65.54	0.087	143.115	0.027526	3.3068	0.00544	78.64542	9.830677

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO ₂ (Lb/mmBtu)	Common Stack SO ₂ (Lb/Hr)	Common Stack CO ₂ (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-08-2016 21	0	167	1635.2	0.4200	686.8	1.8880	3087.3	167.8	1.00	65.15	0.087	142.2624	0.027362	3.3068	0.005407	78.17689	9.772112
	09-08-2016 22	0	124	1261.9	0.4730	596.9	1.8783	2370.2	129.5	1.00	50.27	0.087	109.7853	0.021115	3.3068	0.004173	60.32988	7.541235
	09-08-2016 23	0	99	1095.4	0.4910	537.8	1.8603	2037.8	112.4	1.00	43.64	0.087	95.2998	0.018329	3.3068	0.003622	52.36972	6.546215
	09-09-2016 00	0	98	1090.4	0.4940	538.7	1.8573	2025.2	111.9	1.00	43.44	0.087	94.8648	0.018246	3.3068	0.003606	52.13068	6.516335
	09-09-2016 01	0	98	1097.2	0.5060	555.2	1.8425	2021.6	112.6	1.00	43.71	0.087	95.4564	0.01836	3.3068	0.003628	52.45578	6.556972
	09-09-2016 02	0	98	1093.3	0.4900	535.7	1.8359	2007.2	112.2	1.00	43.56	0.087	95.1171	0.018294	3.3068	0.003615	52.26932	6.533665
	09-09-2016 03	0	98	1083.4	0.5040	546.0	1.8381	1991.4	111.2	1.00	43.16	0.087	94.2558	0.018129	3.3068	0.003583	51.79602	6.474502
	09-09-2016 04	0	98	1080.8	0.4990	539.3	1.8443	1993.3	110.9	1.00	43.06	0.087	94.0296	0.018085	3.3068	0.003574	51.67171	6.458964
	09-09-2016 05	0	122	1294.7	0.4610	596.9	1.8344	2375.0	132.8	1.00	51.58	0.087	112.6389	0.021664	3.3068	0.004281	61.89801	7.737251
	09-09-2016 06	0	157	1580.7	0.4780	755.6	1.8444	2915.4	162.2	1.00	62.98	0.087	137.5209	0.02645	3.3068	0.005227	75.57131	9.446414
TRUE	09-09-2016 07	0	152	1524.6	0.9930	1513.3	1.8171	2770.4	156.4	1.00	60.74	0.087	132.6402	0.025511	3.3068	0.005042	72.88924	9.111155
TRUE	09-09-2016 08	0	157	1543.0	0.9930	1532.2	1.8172	2808.9	158.9	1.00	61.47	0.087	134.241	0.025819	3.3068	0.005102	73.76892	9.221116
TRUE	09-09-2016 09	0	167	1581.4	0.9930	1570.3	1.8172	2873.7	162.3	1.00	63.00	0.087	137.5818	0.026462	3.3068	0.005229	75.60478	9.450598
	09-09-2016 10	0	165	1544.9	0.4360	673.6	1.7901	2765.5	158.5	1.00	61.55	0.087	134.4063	0.025851	3.3068	0.005109	73.85976	9.23247
	09-09-2016 11	0	165	1546.4	0.4240	655.7	1.8055	2792.0	158.7	1.00	61.61	0.087	134.5368	0.025876	3.3068	0.005114	73.93147	9.241434
	09-09-2016 12	0	167	1577.7	0.4230	667.4	1.7994	2838.9	161.9	1.00	62.86	0.087	137.2599	0.0264	3.3068	0.005217	75.42789	9.428486
	09-09-2016 13	0	167	1567.0	0.4420	692.6	1.8137	2842.0	160.8	1.00	62.43	0.087	136.329	0.026221	3.3068	0.005182	74.91633	9.364542
	09-09-2016 14	0	165	1560.7	0.4440	693.0	1.8094	2824.0	160.1	1.00	62.18	0.087	135.7809	0.026115	3.3068	0.005161	74.61514	9.326892
	09-09-2016 15	0	165	1565.1	0.4440	694.9	1.8049	2824.9	160.6	1.00	62.35	0.087	136.1637	0.026189	3.3068	0.005175	74.8255	9.353187
	09-09-2016 16	0	165	1557.2	0.4500	700.7	1.8063	2812.7	159.8	1.00	62.04	0.087	135.4764	0.026057	3.3068	0.005149	74.44781	9.305976
	09-09-2016 17	0	166	1568.5	0.4540	712.1	1.7992	2822.0	160.9	1.00	62.49	0.087	136.4595	0.026246	3.3068	0.005187	74.98805	9.373506
	09-09-2016 18	0	137	1338.0	0.5140	687.7	1.7508	2342.6	137.3	1.00	53.31	0.087	116.406	0.022389	3.3068	0.004424	63.96813	7.996016
	09-09-2016 19	0	149	1437.2	0.4920	707.1	1.7594	2528.6	147.5	1.00	57.26	0.087	125.0364	0.024049	3.3068	0.004752	68.71076	8.588845
	09-09-2016 20	0	151	1450.8	0.4940	716.7	1.7754	2575.8	148.9	1.00	57.80	0.087	126.2196	0.024276	3.3068	0.004797	69.36096	8.67012
	09-09-2016 21	0	151	1450.9	0.4860	705.1	1.7851	2590.0	148.9	1.00	57.80	0.087	126.2283	0.024278	3.3068	0.004798	69.36574	8.670717
	09-09-2016 22	0	151	1447.9	0.4610	667.5	1.8047	2613.0	148.6	1.00	57.69	0.087	125.9673	0.024228	3.3068	0.004788	69.22231	8.652789
	09-09-2016 23	0	126	1227.4	0.4340	532.7	1.7410	2136.9	125.9	1.00	48.90	0.087	106.7838	0.020538	3.3068	0.004059	58.68048	7.33506
	09-10-2016 00	0	91	924.8	0.3160	292.2	1.5216	1407.2	94.9	1.00	36.84	0.087	80.4576	0.015475	3.3068	0.003058	44.21355	5.526693
	09-10-2016 01	0	87	918.2	0.3271	300.3	1.5010	1378.2	94.2	1.00	36.58	0.087	79.8834	0.015364	3.3068	0.003036	43.89801	5.487251
	09-10-2016 02	0	36	404.6	0.3621	146.5	1.1793	477.2	41.5	0.87	16.12	0.087	35.20342	0.006771	3.3068	0.001338	19.3452	2.418149
	09-10-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Submission Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-10-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-10-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-11-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substitute Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-12-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-12-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-13-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-14-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-14-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-15-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-16-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-16-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-17-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-18-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-18-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-19-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-20-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-20-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-21-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-22-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-22-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-23-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-24-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-24-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-25-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-26-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-26-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-27-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Subs. Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-28-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-28-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-29-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YF01 Gross Load MW Value	YF02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-30-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	09-30-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-01-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-02-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-02-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-03-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-04-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-04-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-05-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-06-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-06-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-07-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Cost tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-08-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-08-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-09-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-10-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-10-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-11-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-12-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-12-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-13-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minuses)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-14-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-14-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-15-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-16-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-16-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-17-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-18-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-18-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-19-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-20-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-20-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-21-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-21-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-22-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx (lb/mmBtu)	Common Stack NOx (lb/Hr)	Common Stack SO2 (lb/mmBtu)	Common Stack SO2 (lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-23-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-23-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-24-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-25-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-25-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-26-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substation Data	Date/Hour	Y101 Gross Load MW Value	Y102 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-27-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-27-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-28-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx (lb/mmBtu)	Common Stack NOx (lb/Hr)	Common Stack SO2 (lb/mmBtu)	Common Stack SO2 (lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-29-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-29-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-30-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substitution Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-31-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	10-31-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-01-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-02-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-02-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-03-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-04-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-04-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-05-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-06-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-06-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-07-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Subject/Year Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-08-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-08-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-09-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-10-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-10-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-11-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-12-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-12-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-13-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/75Btu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-14-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-14-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-15-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-16-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-16-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-17-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-18-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-18-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-19-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Observed Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-20-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-20-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-21-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-22-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-22-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-23-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-24-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-24-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-25-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx (lb/mmBtu)	Common Stack NOx (lb/Hr)	Common Stack SO2 (lb/mmBtu)	Common Stack SO2 (lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-26-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-26-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-27-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/Hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-28-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-28-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-29-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-30-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	11-30-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-01-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-02-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-02-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-03-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-04-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-04-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-05-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-06-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-06-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-07-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-07-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-08-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date-Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-09-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-09-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-10-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-11-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-11-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-12-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-13-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-13-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-14-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-15-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-15-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-16-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-17-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-17-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-18-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/Hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-19-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-19-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-20-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-21-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-21-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-22-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-23-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-23-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-24-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-25-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-25-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-26-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-27-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-27-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-28-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-29-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-29-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-30-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	12-31-2016 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	12-31-2016 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-01-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-02-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-02-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-03-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-04-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-04-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-05-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-06-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-06-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-07-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (Lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-08-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-08-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-09-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-10-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-10-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-11-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-12-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-12-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-13-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substitution Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-14-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-14-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-15-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-16-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-16-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-17-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-18-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-18-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-19-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-20-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-20-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-21-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-22-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-22-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-23-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (Lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-23-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-24-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-25-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-25-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-26-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-27-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-27-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-28-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Supplemental Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-29-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-29-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-30-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	01-31-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	01-31-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-01-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-02-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-02-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-03-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-04-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-04-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-05-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-06-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-06-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-07-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-08-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-08-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-09-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-10-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-10-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-11-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-12-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-12-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-13-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submission Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-14-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-14-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-15-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-16-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-16-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-17-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-18-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-18-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-19-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-20-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-20-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-21-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-22-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-22-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-23-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-24-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-24-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-25-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-26-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-26-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-27-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	02-28-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	02-28-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-01-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-02-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-02-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-03-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/Hr)	HCl (lb/hr)	HF (lb/hr)
	03-04-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-04-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-05-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/Hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-06-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-06-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-07-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-08-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-08-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 11	0	51	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-09-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-10-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-10-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-11-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-11-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-12-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-12-2017 01	1	0	4.4	0.0000	0.0	0.0000	0.0	0.4	0.28	0.18	0.087	0.382452	7.36E-05	3.3068	1.45E-05	0.210167	0.026271
	03-12-2017 02	1	0	15.6	0.0000	0.0	0.0000	0.0	1.6	1.00	0.62	0.087	1.3572	0.000261	3.3068	5.16E-05	0.745817	0.093227
	03-12-2017 03	0	1	15.6	0.0000	0.0	0.0000	0.0	1.6	1.00	0.62	0.087	1.3572	0.000261	3.3068	5.16E-05	0.745817	0.093227
	03-12-2017 04	0	0	15.6	0.0000	0.0	0.0000	0.0	1.6	1.00	0.62	0.087	1.3572	0.000261	3.3068	5.16E-05	0.745817	0.093227
	03-12-2017 05	0	0	15.6	0.0000	0.0	0.0000	0.0	1.6	1.00	0.62	0.087	1.3572	0.000261	3.3068	5.16E-05	0.745817	0.093227
NO	03-12-2017 06	0	0	15.6	0.0000	0.0	0.0000	0.0	0.0	1.00	0.04	0.087	0.087	1.67E-05	3.3068	3.31E-06	0.047809	0.005976
	03-12-2017 07	1	1	15.9	0.0063	0.1	0.0000	0.0	1.6	1.00	0.63	0.087	1.3833	0.000266	3.3068	5.26E-05	0.760159	0.095502
	03-12-2017 08	0	0	50.6	0.0138	0.7	0.0000	0.0	5.2	1.00	2.02	0.087	4.4022	0.000847	3.3068	0.000167	2.419124	0.30239
	03-12-2017 09	0	0	104.4	0.0307	3.2	0.0249	2.6	10.7	1.00	4.16	0.087	9.0828	0.001747	3.3068	0.000345	4.991235	0.623904
	03-12-2017 10	0	0	159.1	0.0453	7.2	0.0396	6.3	16.3	1.00	6.34	0.087	13.8417	0.002662	3.3068	0.000526	7.606375	0.950797
	03-12-2017 11	0	0	195.1	0.0579	11.3	0.0405	7.9	20.0	1.00	7.77	0.087	16.9737	0.003265	3.3068	0.000645	9.32749	1.165936
	03-12-2017 12	0	0	193.6	0.0579	11.2	0.0351	6.8	19.9	1.00	7.71	0.087	16.8432	0.00324	3.3068	0.00064	9.255777	1.156972
	03-12-2017 13	0	0	173.3	0.0548	9.5	0.0387	6.7	17.8	1.00	6.90	0.087	15.0771	0.0029	3.3068	0.000573	8.285259	1.035657
	03-12-2017 14	0	0	155.2	0.0509	7.9	0.0432	6.7	15.9	1.00	6.18	0.087	13.5024	0.002597	3.3068	0.000513	7.41992	0.92749
	03-12-2017 15	0	0	172.1	0.0517	8.9	0.0389	6.7	17.7	1.00	6.86	0.087	14.9727	0.00288	3.3068	0.000569	8.227888	1.028486
	03-12-2017 16	0	0	189.2	0.0550	10.4	0.0381	7.2	19.4	1.00	7.54	0.087	16.4604	0.003166	3.3068	0.000626	9.045418	1.130677
	03-12-2017 17	0	0	191.7	0.0522	10.0	0.0516	9.9	19.7	1.00	7.64	0.087	16.6779	0.003208	3.3068	0.000634	9.16494	1.145618
	03-12-2017 18	0	0	178.4	0.0471	8.4	0.0510	9.1	18.3	1.00	7.11	0.087	15.5208	0.002985	3.3068	0.00059	8.529084	1.066135
	03-12-2017 19	0	0	178.3	0.0471	8.4	0.0510	9.1	18.3	1.00	7.10	0.087	15.5121	0.002984	3.3068	0.00059	8.524303	1.065538
	03-12-2017 20	0	4	238.1	0.0928	22.1	0.2713	64.6	24.4	1.00	9.49	0.087	20.7147	0.003984	3.3068	0.000787	11.38327	1.422908
	03-12-2017 21	0	16	351.3	0.1819	63.9	0.6732	236.5	36.0	1.00	14.00	0.087	30.5631	0.005878	3.3068	0.001162	16.79522	2.099402
	03-12-2017 22	0	51	631.0	0.2260	142.6	1.1390	718.7	64.7	1.00	25.14	0.087	54.897	0.010559	3.3068	0.002087	30.16733	3.770916
	03-12-2017 23	0	94	863.5	0.3160	272.9	1.3263	1145.3	88.6	1.00	34.40	0.087	75.1245	0.014449	3.3068	0.002855	41.28287	5.160359
	03-13-2017 00	5	103	970.9	0.5800	563.1	1.4603	1417.8	99.6	1.00	38.68	0.087	84.4683	0.016246	3.3068	0.003211	46.41753	5.802191
	03-13-2017 01	40	102	1304.0	0.4960	646.8	1.5505	2021.8	133.8	1.00	51.95	0.087	113.448	0.02182	3.3068	0.004312	62.34263	7.792829
	03-13-2017 02	83	98	1663.7	0.3560	592.3	1.6912	2813.7	170.7	1.00	66.28	0.087	144.7419	0.027839	3.3068	0.005501	79.53944	9.94243
	03-13-2017 03	105	98	1886.0	0.4510	850.6	1.7145	3233.5	193.5	1.00	75.14	0.087	164.082	0.031559	3.3068	0.006237	90.16733	11.27092
	03-13-2017 04	132	98	2084.6	0.4590	956.8	1.7250	3596.0	213.9	1.00	83.05	0.087	181.3602	0.034882	3.3068	0.006893	99.66215	12.45777
	03-13-2017 05	142	101	2193.0	0.4800	1052.6	1.6941	3715.2	225.0	1.00	87.37	0.087	190.791	0.036596	3.3068	0.007252	104.8446	13.10558
	03-13-2017 06	149	129	2449.3	0.4830	1183.0	1.7327	4243.8	251.3	1.00	97.58	0.087	213.0891	0.040984	3.3068	0.008099	117.098	14.63725
	03-13-2017 07	146	145	2570.8	0.4640	1192.9	1.6984	4366.3	263.8	1.00	102.42	0.087	223.6596	0.043017	3.3068	0.008501	122.9068	15.36335
	03-13-2017 08	147	144	2536.7	0.4630	1174.5	1.7107	4339.6	260.3	1.00	101.06	0.087	220.6929	0.042447	3.3068	0.008388	121.2765	15.15956
	03-13-2017 09	142	139	2427.3	0.4590	1114.1	1.7181	4170.3	249.0	1.00	96.71	0.087	211.1751	0.040616	3.3068	0.008027	116.0462	14.50578
	03-13-2017 10	140	139	2418.5	0.4590	1110.1	1.7136	4144.3	248.1	1.00	96.35	0.087	210.4095	0.040469	3.3068	0.007997	115.6255	14.45319
	03-13-2017 11	141	139	2426.2	0.4650	1128.2	1.7215	4176.8	248.9	1.00	96.66	0.087	211.0794	0.040598	3.3068	0.008023	115.9936	14.4992
	03-13-2017 12	140	139	2409.2	0.4720	1137.1	1.7450	4204.0	247.2	1.00	95.98	0.087	209.6004	0.040313	3.3068	0.007967	115.1809	14.39761
	03-13-2017 13	138	139	2392.7	0.4650	1112.6	1.7538	4196.3	245.5	1.00	95.33	0.087	208.1649	0.040037	3.3068	0.007912	114.392	14.299
	03-13-2017 14	139	139	2397.0	0.4690	1124.2	1.7622	4224.1	245.9	1.00	95.50	0.087	208.539	0.040109	3.3068	0.007926	114.5976	14.3247
	03-13-2017 15	139	140	2402.7	0.4710	1131.7	1.7731	4260.3	246.5	1.00	95.73	0.087	209.0349	0.040205	3.3068	0.007945	114.8701	14.35876
	03-13-2017 16	139	139	2425.8	0.4630	1123.1	1.7761	4308.5	248.9	1.00	96.65	0.087	211.0446	0.040591	3.3068	0.008022	115.9745	14.49681
	03-13-2017 17	138	139	2427.1	0.4700	1140.7	1.7789	4317.6	249.0	1.00	96.70	0.087	211.1577	0.040613	3.3068	0.008026	116.0367	14.50458
	03-13-2017 18	141	139	2418.1	0.4760	1151.0	1.7977	4347.0	248.1	1.00	96.34	0.087	210.3747	0.040462	3.3068	0.007996	115.6064	14.4508
	03-13-2017 19	141	139	2445.4	0.4760	1164.0	1.7859	4369.6	250.9	1.00	97.43	0.087	212.7498	0.040919	3.3068	0.008086	116.9116	14.61394
	03-13-2017 20	141	140	2450.2	0.4720	1156.5	1.8446	4519.6	251.4	1.00	97.62	0.087	213.1674	0.040999	3.3068	0.008102	117.141	14.64263
	03-13-2017 21	141	139	2451.5	0.4770	1169.4	1.9033	4666.0	251.5	1.00	97.67	0.087	213.2805	0.041021	3.3068	0.008107	117.2032	14.6504

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-13-2017 22	144	139	2493.2	0.4850	1209.2	1.9321	4817.2	255.8	1.00	99.33	0.087	216.9084	0.041719	3.3068	0.008244	119.1968	14.8996
	03-13-2017 23	144	139	2500.5	0.4850	1212.7	1.9412	4854.0	256.6	1.00	99.62	0.087	217.5435	0.041841	3.3068	0.008269	119.5458	14.94323
	03-14-2017 00	142	139	2478.0	0.4800	1189.4	1.9450	4819.6	254.2	1.00	98.73	0.087	215.586	0.041465	3.3068	0.008194	118.4701	14.80876
	03-14-2017 01	137	139	2463.5	0.4770	1175.1	1.9394	4777.8	252.8	1.00	98.15	0.087	214.3245	0.041222	3.3068	0.008146	117.7769	14.72211
	03-14-2017 02	140	139	2465.2	0.4790	1180.8	1.9471	4800.0	252.9	1.00	98.22	0.087	214.4724	0.04125	3.3068	0.008152	117.8582	14.73227
	03-14-2017 03	141	139	2471.0	0.4810	1188.6	1.9474	4812.1	253.5	1.00	98.45	0.087	214.977	0.041347	3.3068	0.008171	118.1355	14.76693
	03-14-2017 04	139	139	2455.2	0.4800	1178.5	1.9565	4803.5	251.9	1.00	97.82	0.087	213.6024	0.041083	3.3068	0.008119	117.3801	14.67251
	03-14-2017 05	141	139	2475.6	0.4830	1195.7	1.9384	4798.6	254.0	1.00	98.63	0.087	215.3772	0.041424	3.3068	0.008186	118.3554	14.79442
	03-14-2017 06	141	139	2465.5	0.4900	1208.1	1.9616	4836.4	253.0	1.00	98.23	0.087	214.4985	0.041255	3.3068	0.008153	117.8725	14.73406
	03-14-2017 07	141	139	2468.0	0.4920	1214.3	1.9568	4829.3	253.2	1.00	98.33	0.087	214.716	0.041297	3.3068	0.008161	117.992	14.749
TRUE	03-14-2017 08	140	139	2443.3	0.9930	2426.2	1.9341	4725.7	250.7	1.00	97.34	0.087	212.5671	0.040884	3.3068	0.008079	116.8112	14.60139
	03-14-2017 09	141	139	2428.6	0.4700	1141.4	1.9109	4640.9	249.2	1.00	96.76	0.087	211.2882	0.040638	3.3068	0.008031	116.1084	14.51355
	03-14-2017 10	141	139	2423.5	0.4720	1143.9	1.9174	4646.7	248.7	1.00	96.55	0.087	210.8445	0.040553	3.3068	0.008014	115.8645	14.48307
	03-14-2017 11	141	138	2409.1	0.4660	1122.6	1.9130	4608.6	247.2	1.00	95.98	0.087	209.5917	0.040312	3.3068	0.007966	115.1761	14.39701
	03-14-2017 12	141	139	2411.4	0.4660	1123.7	1.9205	4631.1	247.4	1.00	96.07	0.087	209.7918	0.04035	3.3068	0.007974	115.2861	14.41076
	03-14-2017 13	141	139	2414.1	0.4660	1125.0	1.9269	4651.7	247.7	1.00	96.18	0.087	210.0267	0.040395	3.3068	0.007983	115.4151	14.42689
	03-14-2017 14	141	139	2418.8	0.4720	1141.7	1.9255	4657.3	248.2	1.00	96.37	0.087	210.4356	0.040474	3.3068	0.007998	115.6398	14.45498
	03-14-2017 15	142	139	2413.7	0.4700	1134.4	1.9265	4650.1	247.6	1.00	96.16	0.087	209.9919	0.040389	3.3068	0.007982	115.396	14.4245
	03-14-2017 16	141	139	2411.5	0.4700	1133.4	1.9141	4615.9	247.4	1.00	96.08	0.087	209.8005	0.040352	3.3068	0.007974	115.2908	14.41135
	03-14-2017 17	139	139	2384.5	0.4650	1108.8	1.9120	4559.1	244.7	1.00	95.00	0.087	207.4515	0.0399	3.3068	0.007885	114	14.25
	03-14-2017 18	139	139	2352.6	0.4620	1086.9	1.9260	4531.1	241.4	1.00	93.73	0.087	204.6762	0.039366	3.3068	0.00778	112.4749	14.05936
	03-14-2017 19	139	139	2388.1	0.4520	1079.4	1.9106	4562.6	245.0	1.00	95.14	0.087	207.7647	0.03996	3.3068	0.007897	114.1721	14.27151
	03-14-2017 20	140	139	2383.6	0.4620	1101.2	1.9260	4590.9	244.6	1.00	94.96	0.087	207.3732	0.039885	3.3068	0.007882	113.957	14.24462
	03-14-2017 21	141	139	2392.3	0.4630	1107.6	1.9221	4598.2	245.5	1.00	95.31	0.087	208.1301	0.040031	3.3068	0.007911	114.3729	14.29661
	03-14-2017 22	140	139	2389.2	0.4610	1101.4	1.9220	4592.1	245.1	1.00	95.19	0.087	207.8604	0.039979	3.3068	0.007901	114.2247	14.27809
	03-14-2017 23	141	139	2400.8	0.4610	1106.8	1.9242	4619.7	246.3	1.00	95.65	0.087	208.8696	0.040173	3.3068	0.007939	114.7793	14.34741
	03-15-2017 00	141	139	2400.5	0.4610	1106.6	1.9249	4620.7	246.3	1.00	95.64	0.087	208.8435	0.040168	3.3068	0.007938	114.7649	14.34562
	03-15-2017 01	141	139	2396.3	0.4590	1099.9	1.9368	4641.1	245.9	1.00	95.47	0.087	208.4781	0.040097	3.3068	0.007924	114.5641	14.32052
	03-15-2017 02	140	139	2389.5	0.4540	1084.8	1.9484	4655.6	245.2	1.00	95.20	0.087	207.8865	0.039984	3.3068	0.007902	114.239	14.27988
	03-15-2017 03	140	139	2366.6	0.4660	1102.8	1.9670	4655.0	242.8	1.00	94.29	0.087	205.8942	0.0396	3.3068	0.007826	113.1442	14.14303
	03-15-2017 04	140	139	2361.8	0.4620	1091.2	1.9739	4662.0	242.3	1.00	94.10	0.087	205.4766	0.03952	3.3068	0.00781	112.9147	14.11434
	03-15-2017 05	141	139	2367.7	0.4600	1089.1	1.9619	4645.1	242.9	1.00	94.33	0.087	205.9899	0.039619	3.3068	0.007829	113.1968	14.1496
	03-15-2017 06	141	119	2207.6	0.4150	916.2	1.9809	4373.0	226.5	1.00	87.95	0.087	192.0612	0.03694	3.3068	0.0073	105.5426	13.19283
	03-15-2017 07	140	119	2267.7	0.4120	934.3	1.9664	4459.1	232.7	1.00	90.35	0.087	197.2899	0.037946	3.3068	0.007499	108.4159	13.55199
	03-15-2017 08	141	119	2295.9	0.4140	950.5	1.9610	4502.3	235.6	1.00	91.47	0.087	199.7433	0.038417	3.3068	0.007592	109.7641	13.72052
	03-15-2017 09	140	119	2259.4	0.4150	937.7	1.9775	4468.0	231.8	1.00	90.02	0.087	196.5678	0.037807	3.3068	0.007471	108.0191	13.50239
TRUE	03-15-2017 10	140	119	2230.8	0.9930	2215.2	2.0085	4480.6	228.9	1.00	88.88	0.087	194.0796	0.037328	3.3068	0.007377	106.6518	13.33147
TRUE	03-15-2017 11	141	118	2235.5	0.9930	2219.9	2.0085	4490.1	229.9	1.00	89.06	0.087	194.4885	0.037407	3.3068	0.007392	106.8765	13.35956
TRUE	03-15-2017 12	141	119	2230.7	0.9930	2215.1	2.0085	4480.4	228.9	1.00	88.87	0.087	194.0709	0.037326	3.3068	0.007376	106.647	13.33088
TRUE	03-15-2017 13	141	120	2235.4	0.9930	2219.8	2.0085	4489.9	229.4	1.00	89.06	0.087	194.4798	0.037405	3.3068	0.007392	106.8717	13.35896
	03-15-2017 14	141	121	2202.3	0.4510	993.2	2.0655	4548.8	226.0	1.00	87.74	0.087	191.6001	0.036851	3.3068	0.007283	105.2892	13.16116
	03-15-2017 15	140	140	2413.0	0.4970	1199.3	2.0387	4919.4	247.6	1.00	96.14	0.087	209.931	0.040377	3.3068	0.007979	115.3625	14.42032
	03-15-2017 16	140	140	2401.5	0.4950	1188.7	2.0322	4880.4	246.4	1.00	95.68	0.087	208.9305	0.040184	3.3068	0.007941	114.8127	14.35159
	03-15-2017 17	140	139	2389.4	0.4880	1166.0	2.0419	4879.0	245.2	1.00	95.20	0.087	207.8778	0.039982	3.3068	0.007901	114.2343	14.27928
	03-15-2017 18	139	139	2384.6	0.4830	1151.8	2.0318	4845.1	244.7	1.00	95.00	0.087	207.4602	0.039902	3.3068	0.007885	114.0048	14.2506
	03-15-2017 19	138	139	2380.1	0.4820	1147.2	2.0315	4835.1	244.2	1.00	94.82	0.087	207.0687	0.039826	3.3068	0.00787	113.7896	14.22371
	03-15-2017 20	143	140	2442.7	0.4780	1167.6	2.0151	4922.4	250.6	1.00	97.32	0.087	212.5149	0.040874	3.3068	0.008077	116.7825	14.59781

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Substituted Date	Date/Hour	Y01 Gross Load MW Value	Y02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-15-2017 21	144	139	2419.9	0.4850	1173.7	2.0297	4911.6	248.3	1.00	96.41	0.087	210.5313	0.040492	3.3068	0.008002	115.6924	14.46155
	03-15-2017 22	143	139	2412.6	0.4840	1167.7	2.0218	4877.7	247.5	1.00	96.12	0.087	209.8962	0.04037	3.3068	0.007978	115.3434	14.41793
	03-15-2017 23	143	139	2434.2	0.4740	1153.8	2.0034	4876.6	249.7	1.00	96.98	0.087	211.7754	0.040732	3.3068	0.008049	116.3761	14.54701
	03-16-2017 00	141	139	2426.6	0.4690	1138.1	1.9952	4841.6	249.0	1.00	96.68	0.087	211.1142	0.040604	3.3068	0.008024	116.0127	14.50159
	03-16-2017 01	141	139	2422.9	0.4640	1124.2	1.9952	4834.1	248.6	1.00	96.53	0.087	210.7923	0.040543	3.3068	0.008012	115.8359	14.47948
	03-16-2017 02	141	139	2425.3	0.4640	1125.3	1.9863	4817.3	248.8	1.00	96.63	0.087	211.0011	0.040583	3.3068	0.00802	115.9506	14.49382
	03-16-2017 03	140	139	2393.1	0.4690	1122.4	2.0070	4802.9	245.5	1.00	95.34	0.087	208.1997	0.040044	3.3068	0.007913	114.4112	14.30139
	03-16-2017 04	140	140	2391.9	0.4720	1129.0	2.0027	4790.3	245.4	1.00	95.29	0.087	208.0953	0.040024	3.3068	0.007909	114.3538	14.29422
	03-16-2017 05	139	140	2390.3	0.4660	1113.9	1.9828	4739.6	245.2	1.00	95.23	0.087	207.9561	0.039997	3.3068	0.007904	114.2773	14.28466
	03-16-2017 06	137	139	2347.4	0.4710	1105.6	2.0194	4740.4	240.8	1.00	93.52	0.087	204.2238	0.039279	3.3068	0.007762	112.2263	14.02829
	03-16-2017 07	137	139	2394.0	0.4720	1130.0	2.0305	4860.9	245.6	1.00	95.38	0.087	208.278	0.040059	3.3068	0.007916	114.4542	14.30677
	03-16-2017 08	135	140	2303.5	0.4750	1094.2	2.0447	4710.0	236.3	1.00	91.77	0.087	200.4045	0.038545	3.3068	0.007617	110.1275	13.76594
	03-16-2017 09	133	139	2304.0	0.4770	1099.0	2.0448	4711.2	236.4	1.00	91.79	0.087	200.448	0.038553	3.3068	0.007619	110.1514	13.76892
	03-16-2017 10	136	139	2333.9	0.4700	1096.9	2.0344	4748.1	239.5	1.00	92.98	0.087	203.0493	0.039053	3.3068	0.007718	111.5809	13.94761
	03-16-2017 11	136	140	2340.9	0.4740	1109.6	2.0322	4757.2	240.2	1.00	93.26	0.087	203.6583	0.03917	3.3068	0.007741	111.9155	13.98944
	03-16-2017 12	136	139	2361.3	0.4660	1100.4	2.0065	4738.3	242.3	1.00	94.08	0.087	205.4331	0.039512	3.3068	0.007808	112.8908	14.11135
	03-16-2017 13	135	139	2304.4	0.4730	1090.0	2.0510	4726.3	236.4	1.00	91.81	0.087	200.4828	0.038556	3.3068	0.00762	110.1705	13.77131
	03-16-2017 14	136	139	2333.2	0.4700	1096.6	2.0289	4733.8	239.4	1.00	92.96	0.087	202.9884	0.039042	3.3068	0.007715	111.5474	13.94343
	03-16-2017 15	137	139	2334.6	0.4690	1094.9	2.0326	4745.3	239.5	1.00	93.01	0.087	203.1102	0.039065	3.3068	0.00772	111.6143	13.95179
	03-16-2017 16	137	139	2334.3	0.4730	1104.1	2.0271	4731.8	239.5	1.00	93.00	0.087	203.0841	0.03906	3.3068	0.007719	111.6	13.95
	03-16-2017 17	136	139	2336.8	0.4720	1103.0	2.0202	4720.7	239.8	1.00	93.10	0.087	203.3016	0.039102	3.3068	0.007727	111.7195	13.96494
	03-16-2017 18	139	140	2356.4	0.4730	1114.6	2.0133	4744.1	241.8	1.00	93.88	0.087	205.0068	0.03943	3.3068	0.007792	112.6566	14.08207
	03-16-2017 19	140	139	2360.6	0.4710	1111.8	2.0110	4747.2	242.2	1.00	94.05	0.087	205.3722	0.0395	3.3068	0.007806	112.8574	14.10717
	03-16-2017 20	140	139	2357.7	0.4710	1110.5	2.0176	4757.0	241.9	1.00	93.93	0.087	205.1199	0.039452	3.3068	0.007796	112.7187	14.08984
	03-16-2017 21	140	139	2353.9	0.4640	1092.2	2.0322	4783.5	241.5	1.00	93.78	0.087	204.7893	0.039388	3.3068	0.007784	112.5371	14.06713
	03-16-2017 22	139	140	2359.5	0.4680	1104.2	2.0333	4797.5	242.1	1.00	94.00	0.087	205.2765	0.039482	3.3068	0.007802	112.8048	14.1006
	03-16-2017 23	139	139	2362.9	0.4680	1105.8	2.0366	4812.3	242.4	1.00	94.14	0.087	205.5723	0.039539	3.3068	0.007814	112.9673	14.12092
	03-17-2017 00	139	140	2347.9	0.4650	1091.8	2.0592	4834.8	240.9	1.00	93.54	0.087	204.2673	0.039288	3.3068	0.007764	112.2502	14.03127
	03-17-2017 01	140	140	2381.4	0.4590	1093.1	2.0326	4840.4	244.3	1.00	94.88	0.087	207.1818	0.039848	3.3068	0.007875	113.8518	14.23147
	03-17-2017 02	140	139	2388.7	0.4600	1098.8	2.0301	4849.2	245.1	1.00	95.17	0.087	207.8169	0.03997	3.3068	0.007899	114.2008	14.2751
	03-17-2017 03	141	139	2363.2	0.4650	1098.9	2.0526	4850.8	242.5	1.00	94.15	0.087	205.5984	0.039544	3.3068	0.007815	112.9817	14.12271
	03-17-2017 04	140	139	2393.9	0.4550	1089.2	2.0286	4856.3	245.6	1.00	95.37	0.087	208.2693	0.040057	3.3068	0.007916	114.4494	14.30618
	03-17-2017 05	138	139	2333.7	0.4690	1094.5	2.0333	4745.1	239.4	1.00	92.98	0.087	203.0319	0.03905	3.3068	0.007717	111.5713	13.94641
	03-17-2017 06	137	139	2353.7	0.4540	1068.6	2.0457	4815.0	241.5	1.00	93.77	0.087	204.7719	0.039385	3.3068	0.007783	112.5275	14.06594
	03-17-2017 07	138	140	2347.3	0.4490	1053.9	2.0450	4800.2	240.8	1.00	93.52	0.087	204.2151	0.039278	3.3068	0.007762	112.2215	14.02769
	03-17-2017 08	138	139	2389.2	0.4570	1091.9	1.9962	4769.3	245.1	1.00	95.19	0.087	207.8604	0.039979	3.3068	0.007901	114.2247	14.27809
	03-17-2017 09	137	140	2317.9	0.4680	1084.8	2.0544	4761.8	237.8	1.00	92.35	0.087	201.6573	0.038786	3.3068	0.007665	110.8159	13.85199
	03-17-2017 10	141	139	2346.0	0.4550	1067.4	2.0205	4740.2	240.7	1.00	93.47	0.087	204.102	0.039256	3.3068	0.007758	112.1594	14.01992
	03-17-2017 11	143	139	2362.9	0.4610	1089.3	1.9998	4725.3	242.4	1.00	94.14	0.087	205.5723	0.039539	3.3068	0.007814	112.9673	14.12092
	03-17-2017 12	138	139	2338.8	0.4610	1078.2	1.9669	4600.3	240.0	1.00	93.18	0.087	203.4756	0.039135	3.3068	0.007734	111.8151	13.97689
	03-17-2017 13	143	139	2369.8	0.4410	1045.1	1.8860	4469.5	243.1	1.00	94.41	0.087	206.1726	0.039654	3.3068	0.007836	113.2972	14.16215
	03-17-2017 14	117	139	2121.6	0.4040	857.1	1.8106	3841.3	217.7	1.00	84.53	0.087	184.5792	0.035501	3.3068	0.007016	101.4311	12.67888
	03-17-2017 15	105	139	1981.7	0.3830	759.0	1.7133	3395.2	203.3	1.00	78.95	0.087	172.4079	0.03316	3.3068	0.006553	94.74263	11.84283
	03-17-2017 16	105	138	1977.5	0.4000	791.0	1.6910	3343.9	202.9	1.00	78.78	0.087	172.0425	0.03309	3.3068	0.006539	94.54183	11.81773
	03-17-2017 17	76	116	1564.7	0.3890	608.7	1.6789	2626.9	160.5	1.00	62.34	0.087	136.1289	0.026182	3.3068	0.005174	74.80637	9.350797
	03-17-2017 18	65	96	1410.1	0.3830	540.1	1.6127	2274.0	144.7	1.00	56.18	0.087	122.6787	0.023595	3.3068	0.004663	67.41514	8.426892
	03-17-2017 19	63	71	1200.8	0.4220	506.7	1.5894	1908.6	123.2	1.00	47.84	0.087	104.4696	0.020093	3.3068	0.003971	57.40876	7.176096

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Hourly Mass Emissions
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Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-17-2017 20	70	66	1232.6	0.3960	488.1	1.5722	1937.9	126.5	1.00	49.11	0.087	107.2362	0.020625	3.3068	0.004076	58.92908	7.366135
	03-17-2017 21	47	65	1044.6	0.4290	448.1	1.4858	1552.1	107.2	1.00	41.62	0.087	90.8802	0.017479	3.3068	0.003454	49.94104	6.242629
	03-17-2017 22	41	68	1007.9	0.4210	424.3	1.4647	1476.3	103.4	1.00	40.16	0.087	87.6873	0.016865	3.3068	0.003333	48.18645	6.023307
	03-17-2017 23	4	69	631.3	0.3060	193.2	1.4519	916.6	64.8	1.00	25.15	0.087	54.9231	0.010564	3.3068	0.002088	30.18167	3.772709
	03-18-2017 00	0	69	581.5	0.2600	151.2	1.5133	880.0	59.7	1.00	23.17	0.087	50.5905	0.00973	3.3068	0.001923	27.8008	3.4751
	03-18-2017 01	0	71	641.2	0.2441	156.5	1.5250	977.8	65.8	1.00	25.55	0.087	55.7844	0.010729	3.3068	0.00212	30.65498	3.831873
	03-18-2017 02	0	67	634.8	0.2270	144.1	1.5170	963.0	65.1	1.00	25.29	0.087	55.2276	0.010622	3.3068	0.002099	30.349	3.793625
	03-18-2017 03	0	10	95.2	0.1449	13.8	1.2388	117.9	9.8	0.27	3.79	0.087	8.282574	0.001593	3.3068	0.000315	4.55149	0.568936
	03-18-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-18-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-19-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-19-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-20-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-21-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-21-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-22-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-23-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-23-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-24-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-25-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-25-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-26-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-27-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-27-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-28-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	03-29-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-29-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-30-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/Hr)	HCl (lb/hr)	HF (lb/hr)
	03-31-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	03-31-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-01-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/hr)	Common Stack CO2 (Tons/hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-02-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-02-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-03-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-04-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-04-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-05-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-06-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-06-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-07-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-08-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-08-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-09-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-10-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-10-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-11-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-12-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-12-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-13-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-14-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-14-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-15-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-16-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-16-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-17-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-18-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-18-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-19-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Time	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-20-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-20-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-21-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-22-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-22-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-23-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-24-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-24-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-25-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Stack Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-26-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-26-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-27-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-27-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-28-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	04-29-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-29-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	04-30-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-01-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-01-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-02-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-03-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-03-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-04-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-05-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-05-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-06-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-07-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-07-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-08-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-09-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-09-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-10-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-11-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-11-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-12-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-13-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-13-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-14-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-15-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-15-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-16-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-17-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-17-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-18-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-19-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-19-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-20-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-21-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-21-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-22-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-23-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-23-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-24-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-25-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-25-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-26-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-27-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-27-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-28-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-29-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-29-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-30-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	05-31-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	05-31-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-01-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-02-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-02-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-03-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-04-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-04-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-05-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-06-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-06-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-07-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-08-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-08-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-09-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-10-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-10-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-11-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substitute Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-12-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-12-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-13-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-13-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-14-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/Hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-15-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-15-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-16-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-17-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-17-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-18-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-19-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-19-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-20-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-21-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-21-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-22-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-23-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-23-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-24-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-25-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-25-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-26-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-27-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-27-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-28-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	06-29-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-29-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	06-30-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-01-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-01-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-02-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-03-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-03-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-04-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-05-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-05-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-06-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-07-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-07-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-08-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
TRUE TRUE TRUE	07-09-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 13	0	0	0.0	0.0000	0.0	138.3000	2.8	0.0	0.02	0.00	0.087	0.00174	3.35E-07	3.3068	6.61E-08	0.000956	0.00012
TRUE TRUE TRUE	07-09-2017 14	0	0	0.0	0.0000	0.0	149.4000	71.7	0.0	0.48	0.02	0.087	0.04176	8.03E-06	3.3068	1.59E-06	0.022948	0.002869
	07-09-2017 15	0	0	0.0	0.0000	0.0	150.9000	110.2	0.0	0.73	0.03	0.087	0.06351	1.22E-05	3.3068	2.41E-06	0.0349	0.004363
	07-09-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
TRUE TRUE TRUE	07-09-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
TRUE TRUE TRUE	07-09-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-09-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
TRUE TRUE TRUE	07-10-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
TRUE TRUE TRUE	07-10-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
TRUE TRUE TRUE	07-10-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-10-2017 11	0	0	0.0	0.0000	0.0	0.2382	55.0	25.4	0.93	9.86	0.087	21.53824	0.004143	3.3068	0.000819	11.83582	1.479478
	07-10-2017 12	0	0	0.0	0.0000	0.0	0.2384	65.2	28.1	1.00	10.90	0.087	23.7945	0.004576	3.3068	0.000904	13.0757	1.634462
	07-10-2017 13	0	0	0.0	0.0000	0.0	0.2383	71.5	30.8	1.00	11.96	0.087	26.1087	0.005022	3.3068	0.000992	14.34741	1.793426
TRUE TRUE TRUE	07-10-2017 14	0	0	0.0	0.0000	0.0	0.2382	75.2	32.5	1.00	12.61	0.087	27.5442	0.005298	3.3068	0.001047	15.13625	1.892032
	07-10-2017 15	0	0	0.0	0.0000	0.0	0.2383	79.1	34.1	1.00	13.23	0.087	28.884	0.005555	3.3068	0.001098	15.87251	1.984064
	07-10-2017 16	0	0	0.0	0.0000	0.0	0.2384	81.8	35.2	1.00	13.67	0.087	29.8497	0.005741	3.3068	0.001135	16.40319	2.050398
	07-10-2017 17	0	0	0.0	0.0000	0.0	0.2382	83.7	36.1	1.00	14.00	0.087	30.5718	0.00588	3.3068	0.001162	16.8	2.1
TRUE TRUE TRUE	07-10-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	30.7197	0.005908	3.3068	0.001168	16.88127	2.110159
	07-10-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	30.972	0.005957	3.3068	0.001177	17.01992	2.12749
	07-10-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	31.1286	0.005987	3.3068	0.001183	17.10598	2.138247
	07-10-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	31.0416	0.00597	3.3068	0.00118	17.05817	2.132271
TRUE TRUE TRUE	07-10-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	31.1721	0.005995	3.3068	0.001185	17.12988	2.141235
	07-10-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	31.1721	0.005995	3.3068	0.001185	17.12988	2.141235
	07-11-2017 00	0	0	0.0	0.0000	0.0	0.0022	0.8	0.3	1.00	14.58	0.087	31.8333	0.006123	3.3068	0.00121	17.49323	2.186653
	07-11-2017 01	0	0	0.0	0.0000	0.0	0.0084	3.3	40.4	1.00	15.69	0.087	34.2606	0.006589	3.3068	0.001302	18.82709	2.353386
TRUE TRUE TRUE	07-11-2017 02	0	0	0.0	0.0000	0.0	0.0045	1.8	40.8	1.00	15.82	0.087	34.5564	0.006646	3.3068	0.001313	18.98964	2.373705
	07-11-2017 03	0	0	0.0	0.0000	0.0	0.0055	2.2	41.4	1.00	16.06	0.087	35.061	0.006743	3.3068	0.001333	19.26693	2.408367
	07-11-2017 04	0	0	0.0	0.0000	0.0	0.3127	125.6	41.2	1.00	16.00	0.087	34.9479	0.006722	3.3068	0.001328	19.20478	2.400598
	07-11-2017 05	0	0	0.0	0.0000	0.0	0.7777	307.1	40.5	1.00	15.73	0.087	34.3563	0.006608	3.3068	0.001306	18.87968	2.35996
TRUE TRUE TRUE	07-11-2017 06	0	0	0.0	0.0000	0.0	1.4540	570.1	40.2	1.00	15.62	0.087	34.1127	0.006561	3.3068	0.001297	18.74582	2.343227
	07-11-2017 07	0	0	0.0	0.0000	0.0	2.1082	857.4	41.7	1.00	16.20	0.087	35.3829	0.006805	3.3068	0.001345	19.44382	2.430478
	07-11-2017 08	0	0	0.0	0.0000	0.0	1.3993	1320.1	96.8	1.00	37.59	0.087	82.0758	0.015786	3.3068	0.00312	45.10279	5.637849

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Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-11-2017 09	0	111	1054.2	0.4190	441.7	1.5748	1660.2	108.2	1.00	42.00	0.087	91.7154	0.01764	3.3068	0.003486	50.4	6.3
	07-11-2017 10	0	101	958.5	0.4430	424.7	1.7416	1669.5	98.3	1.00	38.19	0.087	83.3982	0.01604	3.3068	0.00317	45.82948	5.728685
	07-11-2017 11	0	99	953.4	0.4430	422.4	1.7491	1657.6	97.8	1.00	37.98	0.087	82.9458	0.015953	3.3068	0.003153	45.58088	5.69761
	07-11-2017 12	0	117	1059.0	0.4790	507.3	1.7958	1901.8	108.6	1.00	42.19	0.087	92.133	0.01772	3.3068	0.003502	50.62948	6.328685
	07-11-2017 13	0	136	1196.2	0.5280	631.6	1.7524	2095.2	122.7	1.00	47.66	0.087	104.0694	0.020016	3.3068	0.003956	57.18884	7.148606
	07-11-2017 14	0	139	1205.8	0.5200	627.0	1.7666	2130.2	123.7	1.00	48.04	0.087	104.9046	0.020177	3.3068	0.003987	57.64781	7.205976
	07-11-2017 15	0	140	1192.5	0.5250	626.1	1.8037	2150.9	122.4	1.00	47.51	0.087	103.7475	0.019954	3.3068	0.003943	57.01195	7.126494
	07-11-2017 16	0	140	1215.0	0.5120	622.1	1.7706	2151.3	124.7	1.00	48.41	0.087	105.705	0.020331	3.3068	0.004018	58.08765	7.260956
	07-11-2017 17	0	140	1192.5	0.5240	624.9	1.8159	2165.5	122.3	1.00	47.51	0.087	103.7475	0.019954	3.3068	0.003943	57.01195	7.126494
	07-11-2017 18	0	134	1168.5	0.5100	595.9	1.8200	2126.7	119.9	1.00	46.55	0.087	101.6595	0.019553	3.3068	0.003864	55.86454	6.983068
	07-11-2017 19	0	115	1057.3	0.5280	558.3	1.8441	1949.8	108.5	1.00	42.12	0.087	91.9851	0.017692	3.3068	0.003496	50.54821	6.318526
	07-11-2017 20	0	119	1104.4	0.5060	558.8	1.8137	2003.1	113.3	1.00	44.00	0.087	96.0828	0.01848	3.3068	0.003652	52.8	6.6
	07-11-2017 21	0	107	996.6	0.5260	524.2	1.8042	1798.1	102.3	1.00	39.71	0.087	86.7042	0.016676	3.3068	0.003296	47.64622	5.955777
	07-11-2017 22	0	99	924.1	0.5160	476.8	1.8419	1702.1	94.8	1.00	36.82	0.087	80.3967	0.015463	3.3068	0.003056	44.18008	5.52251
	07-11-2017 23	0	100	953.1	0.5060	482.3	1.7864	1702.6	97.8	1.00	37.97	0.087	82.9197	0.015948	3.3068	0.003152	45.56653	5.695817
	07-12-2017 00	0	100	957.5	0.5020	480.7	1.7618	1686.9	98.2	1.00	38.15	0.087	83.3025	0.016022	3.3068	0.003166	45.77689	5.722112
	07-12-2017 01	0	100	961.1	0.5070	487.3	1.7434	1675.6	98.6	1.00	38.29	0.087	83.6157	0.016082	3.3068	0.003178	45.949	5.743625
	07-12-2017 02	0	100	961.4	0.5080	488.4	1.7134	1647.3	98.6	1.00	38.30	0.087	83.6418	0.016087	3.3068	0.003179	45.96335	5.745418
	07-12-2017 03	0	100	966.9	0.5100	493.1	1.6916	1635.6	99.2	1.00	38.52	0.087	84.1203	0.016179	3.3068	0.003197	46.22629	5.778287
	07-12-2017 04	0	100	967.6	0.5100	493.5	1.6638	1609.9	99.3	1.00	38.55	0.087	84.1812	0.016191	3.3068	0.0032	46.25976	5.78247
	07-12-2017 05	0	100	955.1	0.5150	491.9	1.6341	1560.7	98.0	1.00	38.05	0.087	83.0937	0.015982	3.3068	0.003158	45.66215	5.707769
	07-12-2017 06	0	100	954.9	0.5190	495.6	1.6171	1544.2	98.0	1.00	38.04	0.087	83.0763	0.015978	3.3068	0.003158	45.65259	5.706574
	07-12-2017 07	0	100	954.1	0.5220	498.0	1.5974	1524.1	97.9	1.00	38.01	0.087	83.0067	0.015965	3.3068	0.003155	45.61434	5.701793
	07-12-2017 08	0	100	965.2	0.5150	497.1	1.5788	1523.9	99.0	1.00	38.45	0.087	83.9724	0.016151	3.3068	0.003192	46.14502	5.768127
	07-12-2017 09	0	100	998.9	0.4930	492.5	1.5151	1513.4	102.5	1.00	39.80	0.087	86.9043	0.016715	3.3068	0.003303	47.75618	5.969522
	07-12-2017 10	0	100	1008.0	0.4900	493.9	1.4902	1502.1	103.4	1.00	40.16	0.087	87.696	0.016867	3.3068	0.003333	48.19124	6.023904
	07-12-2017 11	0	100	978.7	0.5090	498.2	1.5204	1488.0	100.4	1.00	38.99	0.087	85.1469	0.016377	3.3068	0.003236	46.79044	5.848805
	07-12-2017 12	0	102	998.9	0.5080	497.4	1.5099	1487.3	100.8	1.00	39.80	0.087	86.9043	0.016715	3.3068	0.003303	47.75618	5.969522
	07-12-2017 13	0	100	957.5	0.5020	480.7	1.7618	1686.9	98.2	1.00	38.15	0.087	83.3025	0.016022	3.3068	0.003166	45.77689	5.722112
	07-12-2017 14	0	100	961.1	0.5070	487.3	1.7434	1675.6	98.6	1.00	38.29	0.087	83.6157	0.016082	3.3068	0.003178	45.949	5.743625
	07-12-2017 15	0	100	961.4	0.5080	488.4	1.7134	1647.3	98.6	1.00	38.30	0.087	83.6418	0.016087	3.3068	0.003179	45.96335	5.745418
	07-12-2017 16	0	100	966.9	0.5100	493.1	1.6916	1635.6	99.2	1.00	38.52	0.087	84.1203	0.016179	3.3068	0.003197	46.22629	5.778287
	07-12-2017 17	0	100	967.6	0.5100	493.5	1.6638	1609.9	99.3	1.00	38.55	0.087	84.1812	0.016191	3.3068	0.0032	46.25976	5.78247
	07-12-2017 18	0	100	955.1	0.5150	491.9	1.6341	1560.7	98.0	1.00	38.05	0.087	83.0937	0.015982	3.3068	0.003158	45.66215	5.707769
	07-12-2017 19	0	100	954.9	0.5190	495.6	1.6171	1544.2	98.0	1.00	38.04	0.087	83.0763	0.015978	3.3068	0.003158	45.65259	5.706574
	07-12-2017 20	0	100	954.1	0.5220	498.0	1.5974	1524.1	97.9	1.00	38.01	0.087	83.0067	0.015965	3.3068	0.003155	45.61434	5.701793
	07-12-2017 21	0	100	965.2	0.5150	497.1	1.5788	1523.9	99.0	1.00	38.45	0.087	83.9724	0.016151	3.3068	0.003192	46.14502	5.768127
	07-12-2017 22	0	100	998.9	0.4930	492.5	1.5151	1513.4	102.5	1.00	39.80	0.087	86.9043	0.016715	3.3068	0.003303	47.75618	5.969522
	07-12-2017 23	0	100	1008.0	0.4900	493.9	1.4902	1502.1	103.4	1.00	40.16	0.087	87.696	0.016867	3.3068	0.003333	48.19124	6.023904
	07-13-2017 00	0	100	978.7	0.5090	498.2	1.5204	1488.0	100.4	1.00	38.99	0.087	85.1469	0.016377	3.3068	0.003236	46.79044	5.848805
	07-13-2017 01	0	100	998.9	0.5080	497.4	1.5099	1487.3	100.8	1.00	39.80	0.087	86.9043	0.016715	3.3068	0.003303	47.75618	5.969522
	07-13-2017 02	0	100	957.5	0.5020	480.7	1.7618	1686.9	98.2	1.00	38.15	0.087	83.3025	0.016022	3.3068	0.003166	45.77689	5.722112
	07-13-2017 03	0	100	961.1	0.5070	487.3	1.7434	1675.6	98.6	1.00	38.29	0.087	83.6157	0.016082	3.3068	0.003178	45.949	5.743625
	07-13-2017 04	0	100	961.4	0.5080	488.4	1.7134	1647.3	98.6	1.00	38.30	0.087	83.6418	0.016087	3.3068	0.003179	45.96335	5.745418
	07-13-2017 05	0	100	966.9	0.5100	493.1	1.6916	1635.6	99.2	1.00	38.52	0.087	84.1203	0.016179	3.3068	0.003197	46.22629	5.778287
	07-13-2017 06	0	100	967.6	0.5100	493.5	1.6638	1609.9	99.3	1.00	38.55	0.087	84.1812	0.016191	3.3068	0.0032	46.25976	5.78247
	07-13-2017 07	0	100	955.1	0.5150	491.9	1.6341	1560.7	98.0	1.00	38.05	0.087	83.0937	0.015982	3.3068	0.003158	45.66215	5.707769

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
TRUE	07-13-2017 08	0	100	1312.4	0.5070	665.4	1.5253	2001.8	134.7	1.00	52.29	0.087	114.1788	0.02196	3.3068	0.00434	62.74422	7.843028
TRUE	07-13-2017 09	0	129	1481.7	0.5110	757.1	1.5252	2259.9	152.0	1.00	59.03	0.087	128.9079	0.024793	3.3068	0.0049	70.83825	8.854781
TRUE	07-13-2017 10	0	145	1557.1	0.5110	795.7	1.5252	2374.9	159.3	1.00	62.04	0.087	135.4577	0.026055	3.3068	0.005149	74.44303	9.305378
TRUE	07-13-2017 11	0	146	1547.8	0.5110	790.9	1.5252	2360.7	158.8	1.00	61.67	0.087	134.6586	0.025899	3.3068	0.005118	73.99841	9.249801
	07-13-2017 12	0	146	1289.9	0.4800	619.2	1.5570	2008.4	132.3	1.00	51.39	0.087	112.2213	0.021584	3.3068	0.004265	61.66853	7.708566
	07-13-2017 13	0	145	1289.8	0.4570	589.4	1.5782	2035.5	132.3	1.00	51.39	0.087	112.2126	0.021582	3.3068	0.004265	61.66375	7.707968
	07-13-2017 14	0	144	1334.1	0.4390	585.7	1.5959	2129.1	136.9	1.00	53.15	0.087	116.0667	0.022324	3.3068	0.004412	63.78167	7.972709
	07-13-2017 15	0	144	1359.3	0.4430	602.2	1.5207	2067.1	139.5	1.00	54.16	0.087	118.2591	0.022745	3.3068	0.004495	64.98645	8.123307
	07-13-2017 16	34	144	1639.1	0.4380	717.9	1.4148	2319.0	168.2	1.00	65.30	0.087	142.6017	0.027427	3.3068	0.00542	78.36335	9.795418
	07-13-2017 17	52	144	1813.5	0.4190	759.9	1.4854	2693.7	186.1	1.00	72.25	0.087	157.7745	0.030345	3.3068	0.005997	86.7012	10.83765
	07-13-2017 18	68	143	2043.4	0.3970	811.2	1.6619	3395.9	209.7	1.00	81.41	0.087	177.7758	0.034192	3.3068	0.006757	97.69243	12.21155
	07-13-2017 19	84	143	2261.7	0.4180	945.4	1.7455	3947.8	232.0	1.00	90.11	0.087	196.7679	0.037845	3.3068	0.007479	108.1291	13.51614
	07-13-2017 20	102	143	2416.6	0.4630	1118.9	1.8076	4368.3	247.9	1.00	96.28	0.087	210.2442	0.040437	3.3068	0.007991	115.5347	14.44183
	07-13-2017 21	101	135	2303.5	0.4620	1064.2	1.8077	4164.1	236.3	1.00	91.77	0.087	200.4045	0.038545	3.3068	0.007617	110.1275	13.76594
	07-13-2017 22	100	104	2034.1	0.4700	956.0	1.7984	3658.1	208.7	1.00	81.04	0.087	176.9667	0.034037	3.3068	0.006726	97.24781	12.15598
	07-13-2017 23	100	99	2005.5	0.4770	956.6	1.7900	3589.9	205.8	1.00	79.90	0.087	174.4785	0.033558	3.3068	0.006632	95.88048	11.98506
	07-14-2017 00	100	98	1984.8	0.4900	972.6	1.8067	3585.9	203.6	1.00	79.08	0.087	172.6776	0.033212	3.3068	0.006563	94.89084	11.95135
	07-14-2017 01	100	98	1986.2	0.4940	981.2	1.8013	3577.8	203.8	1.00	79.13	0.087	172.7994	0.033235	3.3068	0.006568	94.95777	11.86972
	07-14-2017 02	101	98	1994.4	0.4970	991.2	1.7960	3581.9	204.6	1.00	79.46	0.087	173.5128	0.033372	3.3068	0.006595	95.3498	11.91873
	07-14-2017 03	101	98	1998.5	0.4970	993.3	1.7921	3581.5	205.0	1.00	79.62	0.087	173.8695	0.033441	3.3068	0.006609	95.54582	11.94323
	07-14-2017 04	101	98	2000.3	0.4980	996.1	1.7935	3587.6	205.2	1.00	79.69	0.087	174.0261	0.033471	3.3068	0.006615	95.63187	11.95398
	07-14-2017 05	101	99	1976.4	0.5020	992.2	1.7928	3543.2	202.8	1.00	78.74	0.087	171.9468	0.033071	3.3068	0.006536	94.48924	11.81116
	07-14-2017 06	101	99	1998.8	0.4950	989.4	1.7726	3543.0	205.1	1.00	79.63	0.087	173.8956	0.033446	3.3068	0.00661	95.56016	11.94502
	07-14-2017 07	101	99	1998.9	0.4960	991.5	1.7640	3526.0	205.1	1.00	79.64	0.087	173.9043	0.033448	3.3068	0.00661	95.56494	11.94562
	07-14-2017 08	101	100	2004.9	0.4960	994.4	1.7548	3518.1	205.7	1.00	79.88	0.087	174.4263	0.033548	3.3068	0.00663	95.85179	11.98147
	07-14-2017 09	130	136	2601.0	0.4710	1225.1	1.7589	4574.9	266.9	1.00	103.63	0.087	226.287	0.043523	3.3068	0.008601	124.3506	15.54382
	07-14-2017 10	147	145	2774.3	0.4790	1328.9	1.7592	4880.6	284.6	1.00	110.53	0.087	241.3641	0.046423	3.3068	0.009174	132.6359	16.57948
	07-14-2017 11	147	145	2780.7	0.4730	1315.3	1.7360	4827.4	285.3	1.00	110.78	0.087	241.9209	0.04653	3.3068	0.009195	132.9418	16.61773
	07-14-2017 12	147	145	2763.3	0.4680	1293.2	1.7416	4812.7	283.5	1.00	110.09	0.087	240.4071	0.046238	3.3068	0.009138	132.11	16.51375
	07-14-2017 13	147	145	2752.0	0.4660	1282.4	1.7387	4784.9	282.4	1.00	109.64	0.087	239.424	0.046049	3.3068	0.0091	131.5697	16.44622
	07-14-2017 14	146	144	2764.5	0.4590	1268.9	1.7271	4774.6	283.6	1.00	110.14	0.087	240.5115	0.046259	3.3068	0.009142	132.1673	16.52092
	07-14-2017 15	144	144	2749.6	0.4370	1201.6	1.7331	4765.2	282.1	1.00	109.55	0.087	239.2152	0.046009	3.3068	0.009092	131.455	16.43187
	07-14-2017 16	136	135	2561.3	0.4400	1127.0	1.7511	4485.2	262.8	1.00	102.04	0.087	222.8331	0.042858	3.3068	0.00847	122.4526	15.30657
	07-14-2017 17	121	120	2338.5	0.4280	1000.9	1.7539	4101.5	239.9	1.00	93.17	0.087	203.4495	0.03913	3.3068	0.007733	111.8008	13.9751
	07-14-2017 18	125	124	2386.2	0.4420	1054.7	1.7546	4186.8	244.8	1.00	95.07	0.087	207.5994	0.039928	3.3068	0.007891	114.0813	14.26016
	07-14-2017 19	108	101	2061.9	0.4500	927.9	1.7207	3547.9	211.6	1.00	82.15	0.087	179.3853	0.034502	3.3068	0.006818	98.57689	12.32211
	07-14-2017 20	99	99	1963.7	0.4700	922.9	1.7155	3368.7	201.5	1.00	78.24	0.087	170.8419	0.032859	3.3068	0.006494	93.88207	11.73526
	07-14-2017 21	69	99	1634.8	0.4620	755.3	1.5752	2575.2	167.7	1.00	65.13	0.087	142.2276	0.027355	3.3068	0.005406	78.15777	9.769721
	07-14-2017 22	0	98	971.9	0.4340	421.8	1.5717	1527.5	99.7	1.00	38.72	0.087	84.5553	0.016263	3.3068	0.003214	46.46534	5.808167
	07-14-2017 23	0	77	799.7	0.2930	234.3	1.4017	1120.9	82.1	1.00	31.86	0.087	69.5739	0.013381	3.3068	0.002644	38.23267	4.779084
	07-15-2017 00	0	3	70.5	0.1520	10.7	0.9581	67.5	7.2	0.18	2.81	0.087	6.13089	0.001179	3.3068	0.000233	3.369084	0.421135
	07-15-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

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Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-15-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-15-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-16-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-17-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-17-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.087	0	0	0.0000	0	0	0
	07-18-2017 12	0	0	3.6	0.0000	0.0	0.0000	0.0	0.4	0.08	0.14	0.087	0.315984	6.08E-05	3.3068	1.2E-05	0.173641	0.021705
	07-18-2017 13	1	1	45.0	0.0000	0.0	0.0000	0.0	4.6	1.00	1.79	0.087	3.915	0.000753	3.3068	0.000149	2.151394	0.268924
	07-18-2017 14	1	1	46.3	0.0000	0.0	0.0000	0.0	4.8	1.00	1.84	0.087	4.0281	0.000775	3.3068	0.000153	2.213546	0.276693
	07-18-2017 15	1	1	124.3	0.0088	1.1	0.0000	0.0	12.8	1.00	4.95	0.087	10.8141	0.00208	3.3068	0.000411	5.942629	0.742829
	07-18-2017 16	0	0	221.1	0.0258	5.7	0.0000	0.0	22.7	1.00	8.81	0.087	19.2357	0.0037	3.3068	0.000731	10.57052	1.321315
	07-18-2017 17	0	0	205.8	0.0292	6.0	0.0000	0.0	21.1	1.00	8.20	0.087	17.9046	0.003444	3.3068	0.000681	9.839044	1.22988
	07-18-2017 18	0	0	206.0	0.0340	7.0	0.0000	0.0	21.1	1.00	8.21	0.087	17.922	0.003447	3.3068	0.000681	9.848606	1.231076
	07-18-2017 19	0	0	226.6	0.0380	8.6	0.0000	0.0	23.2	1.00	9.03	0.087	19.7142	0.003792	3.3068	0.000749	10.83347	1.354183
	07-18-2017 20	0	0	232.1	0.0371	8.6	0.0000	0.0	23.8	1.00	9.25	0.087	20.1927	0.003884	3.3068	0.000768	11.09641	1.387052
	07-18-2017 21	0	0	250.5	0.0431	10.8	0.0000	0.0	25.7	1.00	9.98	0.087	21.7935	0.004192	3.3068	0.000828	11.9761	1.497012
	07-18-2017 22	0	2	303.4	0.0781	23.7	0.1335	40.5	31.1	1.00	12.09	0.087	26.3958	0.005077	3.3068	0.001003	14.50518	1.813147
	07-18-2017 23	0	9	403.6	0.2039	82.3	0.5860	236.5	41.4	1.00	16.08	0.087	35.1132	0.006753	3.3068	0.001335	19.29562	2.411952
	07-19-2017 00	0	31	564.7	0.2490	140.6	0.9834	555.3	57.9	1.00	22.50	0.087	49.1289	0.009449	3.3068	0.001867	26.99761	3.374701
	07-19-2017 01	0	73	844.5	0.2860	241.5	1.2776	1078.9	86.6	1.00	33.65	0.087	73.4715	0.014131	3.3068	0.002793	40.3745	5.046813
	07-19-2017 02	0	96	992.5	0.4100	406.9	1.4815	1470.4	101.8	1.00	39.54	0.087	86.3475	0.016608	3.3068	0.003282	47.4502	5.931275
	07-19-2017 03	0	103	1043.4	0.4280	446.6	1.5220	1588.1	107.0	1.00	41.57	0.087	90.7758	0.017459	3.3068	0.00345	49.88367	6.235458
	07-19-2017 04	0	103	1063.4	0.4220	448.8	1.5024	1597.6	109.1	1.00	42.37	0.087	92.5158	0.017794	3.3068	0.003516	50.83984	6.35498

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	07-19-2017 05	9	101	1183.0	0.4360	515.8	1.4066	1664.0	121.4	1.00	47.13	0.087	102.921	0.019795	3.3068	0.003912	56.55777	7.069721
	07-19-2017 06	59	101	1620.2	0.3860	625.4	1.5789	2558.1	166.2	1.00	64.55	0.087	140.9574	0.027111	3.3068	0.005358	77.45976	9.68247
	07-19-2017 07	92	101	1955.4	0.3660	715.7	1.6279	3183.2	200.6	1.00	77.90	0.087	170.1198	0.03272	3.3068	0.006466	93.48526	11.68566
	07-19-2017 08	101	125	2269.9	0.4440	1007.8	1.6956	3848.9	232.9	1.00	90.43	0.087	197.4813	0.037982	3.3068	0.007506	108.5211	13.56514
	07-19-2017 09	117	143	2574.1	0.4250	1094.0	1.7081	4396.8	264.1	1.00	102.55	0.087	223.9467	0.043073	3.3068	0.008512	123.0645	15.38307
	07-19-2017 10	133	145	2699.0	0.4340	1171.4	1.7229	4650.0	276.9	1.00	107.53	0.087	234.813	0.045163	3.3068	0.008925	129.0359	16.12948
	07-19-2017 11	136	144	2706.3	0.4230	1144.8	1.7142	4639.2	277.7	1.00	107.82	0.087	235.4481	0.045285	3.3068	0.008949	129.3849	16.17311
	07-19-2017 12	136	145	2719.1	0.4130	1123.0	1.7006	4624.0	279.0	1.00	108.33	0.087	236.5617	0.045499	3.3068	0.008991	129.9968	16.2496
	07-19-2017 13	136	145	2705.0	0.4200	1136.1	1.7074	4618.5	277.5	1.00	107.77	0.087	235.335	0.045263	3.3068	0.008945	129.3227	16.16534
	07-19-2017 14	136	145	2709.8	0.4260	1154.4	1.7022	4612.6	278.0	1.00	107.96	0.087	235.7526	0.045343	3.3068	0.008961	129.5522	16.19402
	07-19-2017 15	136	145	2683.1	0.4360	1169.8	1.7143	4599.7	275.3	1.00	106.90	0.087	233.4297	0.044896	3.3068	0.008872	128.2757	16.03446
	07-19-2017 16	136	145	2672.0	0.4320	1154.3	1.7107	4571.0	274.1	1.00	106.45	0.087	232.464	0.044711	3.3068	0.008836	127.745	15.96813
	07-19-2017 17	137	145	2670.0	0.4310	1150.8	1.7087	4562.3	273.9	1.00	106.37	0.087	232.29	0.044677	3.3068	0.008829	127.6494	15.95618
	07-19-2017 18	137	145	2661.1	0.4370	1162.9	1.7051	4537.5	273.0	1.00	106.02	0.087	231.5157	0.044528	3.3068	0.0088	127.2239	15.90299
	07-19-2017 19	137	146	2654.7	0.4340	1152.1	1.7005	4514.3	272.4	1.00	105.76	0.087	230.9589	0.044421	3.3068	0.008778	126.9179	15.86474
	07-19-2017 20	136	145	2642.6	0.4280	1131.0	1.7011	4495.4	271.1	1.00	105.28	0.087	229.9062	0.044219	3.3068	0.008738	126.3394	15.79243
	07-19-2017 21	136	145	2647.2	0.4280	1133.0	1.6942	4484.9	271.6	1.00	105.47	0.087	230.3064	0.044296	3.3068	0.008754	126.5594	15.81992
	07-19-2017 22	135	145	2640.6	0.4260	1124.9	1.6875	4456.1	270.9	1.00	105.20	0.087	229.7322	0.044185	3.3068	0.008732	126.2438	15.78048
	07-19-2017 23	119	120	2281.7	0.4150	946.9	1.6681	3806.1	234.1	1.00	90.90	0.087	198.5079	0.03818	3.3068	0.007545	109.0853	13.63566
	07-20-2017 00	96	98	1918.9	0.3950	758.0	1.6684	3201.4	196.9	1.00	76.45	0.087	166.9443	0.032109	3.3068	0.006345	91.74024	11.46753
	07-20-2017 01	95	98	1941.0	0.3980	772.5	1.6487	3200.1	199.1	1.00	77.33	0.087	168.867	0.032479	3.3068	0.006418	92.79681	11.5996
	07-20-2017 02	98	96	1920.1	0.4100	787.2	1.6488	3165.8	197.0	1.00	76.50	0.087	167.0487	0.032129	3.3068	0.006349	91.79761	11.4747
	07-20-2017 03	98	93	1882.6	0.4190	788.8	1.6492	3104.7	193.2	1.00	75.00	0.087	163.7862	0.031502	3.3068	0.006225	90.00478	11.2506
	07-20-2017 04	98	96	1932.2	0.4180	807.7	1.6355	3160.2	198.2	1.00	76.98	0.087	168.1014	0.032332	3.3068	0.006389	92.3761	11.54701
	07-20-2017 05	98	99	1892.7	0.4260	806.3	1.6798	3179.3	194.2	1.00	75.41	0.087	164.6649	0.031671	3.3068	0.006259	90.48765	11.31096
	07-20-2017 06	114	114	2151.0	0.4270	918.5	1.6975	3651.4	220.7	1.00	85.70	0.087	187.137	0.035993	3.3068	0.007113	102.8367	12.85458
	07-20-2017 07	135	137	2559.1	0.4470	1143.9	1.6726	4280.4	262.6	1.00	101.96	0.087	222.6417	0.042822	3.3068	0.008462	122.3474	15.29343
	07-20-2017 08	135	144	2582.3	0.4580	1182.7	1.7028	4397.2	264.9	1.00	102.88	0.087	224.6601	0.04321	3.3068	0.008539	123.4566	15.43207
	07-20-2017 09	135	145	2590.4	0.4690	1214.9	1.7035	4412.8	265.8	1.00	103.20	0.087	225.3648	0.043345	3.3068	0.008566	123.8438	15.48048
	07-20-2017 10	135	144	2602.4	0.4690	1220.5	1.7045	4435.8	267.0	1.00	103.68	0.087	226.4088	0.043546	3.3068	0.008606	124.4175	15.55219
	07-20-2017 11	134	144	2601.8	0.4720	1228.0	1.7139	4459.2	266.9	1.00	103.66	0.087	226.3566	0.043536	3.3068	0.008604	124.3888	15.54861
	07-20-2017 12	134	144	2594.8	0.4750	1232.5	1.7102	4437.6	266.2	1.00	103.38	0.087	225.7476	0.043419	3.3068	0.00858	124.0542	15.50677
	07-20-2017 13	135	144	2602.1	0.4790	1246.4	1.7089	4446.7	267.0	1.00	103.67	0.087	226.3827	0.043541	3.3068	0.008605	124.4032	15.5504
	07-20-2017 14	132	148	2613.7	0.4810	1257.2	1.6991	4441.0	268.2	1.00	104.13	0.087	227.3919	0.043735	3.3068	0.008643	124.9578	15.61972
	07-20-2017 15	116	145	2424.5	0.4930	1195.3	1.7152	4158.4	248.8	1.00	95.59	0.087	210.9315	0.040569	3.3068	0.008017	115.9124	14.48904
	07-20-2017 16	125	145	2543.6	0.4770	1213.3	1.7109	4351.8	261.0	1.00	101.34	0.087	221.2932	0.042562	3.3068	0.008411	121.6064	15.2008
	07-20-2017 17	136	146	2610.7	0.4810	1255.7	1.7371	4535.0	267.9	1.00	104.01	0.087	227.1309	0.043685	3.3068	0.008633	124.8143	15.60179
	07-20-2017 18	136	146	2627.8	0.4840	1271.9	1.7304	4547.1	269.6	1.00	104.69	0.087	228.6186	0.043971	3.3068	0.00869	125.6319	15.70398
	07-20-2017 19	137	146	2632.2	0.4830	1271.4	1.7243	4538.7	270.1	1.00	104.87	0.087	229.0014	0.044045	3.3068	0.008704	125.8422	15.73028
	07-20-2017 20	137	146	2634.2	0.4820	1269.7	1.7303	4558.0	270.3	1.00	104.95	0.087	229.1754	0.044078	3.3068	0.008711	125.9378	15.74223
	07-20-2017 21	137	146	2634.8	0.4780	1259.4	1.7472	4603.4	270.3	1.00	104.97	0.087	229.2276	0.044088	3.3068	0.008713	125.9665	15.74582
	07-20-2017 22	113	113	2139.8	0.4470	956.5	1.7597	3765.5	219.5	1.00	85.25	0.087	186.1626	0.035805	3.3068	0.007076	102.3012	12.78765
	07-20-2017 23	96	97	1890.9	0.4090	773.4	1.7816	3368.9	194.0	1.00	75.33	0.087	164.5083	0.031641	3.3068	0.006253	90.40159	11.3002
	07-21-2017 00	96	98	1921.9	0.4050	778.4	1.7711	3403.8	197.2	1.00	76.57	0.1143	219.6732	0.032159	3.3068	0.006355	91.88367	11.48546
	07-21-2017 01	98	96	1908.1	0.4180	797.6	1.7716	3380.3	195.8	1.00	76.02	0.1143	218.0958	0.031928	3.3068	0.00631	91.2239	11.40299
	07-21-2017 02	98	97	1899.2	0.4290	814.8	1.7786	3377.9	194.9	1.00	75.67	0.1143	217.0786	0.031779	3.3068	0.00628	90.79841	11.3498
	07-21-2017 03	99	97	1903.7	0.4340	826.2	1.7717	3372.7	195.3	1.00	75.84	0.1143	217.5929	0.031855	3.3068	0.006295	91.01355	11.37669

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-21-2017 04	98	98	1912.2	0.4430	847.1	1.7512	3348.7	196.2	1.00	76.18	0.1143	218.5645	0.031997	3.3068	0.006323	91.41992	11.42749
	07-21-2017 05	110	111	2109.3	0.4740	999.8	1.7528	3697.2	216.4	1.00	84.04	0.1143	241.093	0.035295	3.3068	0.006975	100.843	12.60538
	07-21-2017 06	134	142	2580.8	0.4820	1243.9	1.7557	4531.1	264.8	1.00	102.82	0.1143	294.9854	0.043185	3.3068	0.008534	123.3849	15.42311
	07-21-2017 07	136	145	2607.4	0.4730	1233.3	1.7681	4610.1	267.5	1.00	103.88	0.1143	298.0258	0.04363	3.3068	0.008622	124.6566	15.58207
	07-21-2017 08	136	145	2628.5	0.4630	1217.0	1.7592	4624.0	269.7	1.00	104.72	0.1143	300.4376	0.043983	3.3068	0.008692	125.6653	15.70817
	07-21-2017 09	135	144	2611.5	0.4580	1196.1	1.7782	4643.8	267.9	1.00	104.04	0.1143	298.4945	0.043698	3.3068	0.008636	124.8526	15.60657
	07-21-2017 10	136	144	2632.2	0.4510	1187.1	1.7693	4657.2	270.1	1.00	104.87	0.1143	300.8605	0.044045	3.3068	0.008704	125.8422	15.73028
	07-21-2017 11	135	144	2607.6	0.4630	1207.3	1.7897	4666.9	267.5	1.00	103.89	0.1143	298.0487	0.043633	3.3068	0.008623	124.6661	15.58327
	07-21-2017 12	135	144	2615.2	0.4640	1213.5	1.7880	4676.1	268.3	1.00	104.19	0.1143	298.9174	0.04376	3.3068	0.008648	125.0295	15.62869
	07-21-2017 13	136	144	2618.1	0.4650	1217.4	1.7955	4700.9	268.6	1.00	104.31	0.1143	299.2488	0.043809	3.3068	0.008657	125.1681	15.64602
	07-21-2017 14	137	144	2622.7	0.4690	1230.0	1.7942	4705.6	269.1	1.00	104.49	0.1143	299.7746	0.043886	3.3068	0.008673	125.388	15.67351
	07-21-2017 15	136	144	2638.1	0.4600	1213.5	1.7807	4697.6	270.7	1.00	105.10	0.1143	301.5348	0.044144	3.3068	0.008724	126.1243	15.76554
	07-21-2017 16	136	145	2646.6	0.4690	1241.3	1.7851	4724.4	271.5	1.00	105.44	0.1143	302.5064	0.044286	3.3068	0.008724	126.5307	15.81633
	07-21-2017 17	137	146	2628.7	0.4760	1251.3	1.7985	4727.8	269.7	1.00	104.73	0.1143	300.4604	0.043986	3.3068	0.008693	125.6749	15.70936
	07-21-2017 18	137	146	2634.2	0.4780	1259.1	1.7935	4724.4	270.3	1.00	104.95	0.1143	301.0891	0.044078	3.3068	0.008711	125.9378	15.74223
	07-21-2017 19	138	146	2646.2	0.4810	1272.8	1.7846	4722.5	271.5	1.00	105.43	0.1143	302.4607	0.044279	3.3068	0.00875	126.5116	15.81394
	07-21-2017 20	138	147	2644.4	0.4830	1277.2	1.7904	4734.5	271.3	1.00	105.35	0.1143	302.2549	0.044249	3.3068	0.008744	126.4255	15.80319
	07-21-2017 21	138	146	2645.3	0.4780	1264.5	1.7908	4737.1	271.4	1.00	105.39	0.1143	302.3578	0.044264	3.3068	0.008747	126.4685	15.80857
	07-21-2017 22	112	115	2123.6	0.4630	983.2	1.7769	3773.5	217.9	1.00	84.61	0.1143	242.7275	0.035534	3.3068	0.007022	101.5267	12.69084
	07-21-2017 23	96	99	1888.2	0.4220	796.8	1.7727	3347.3	193.7	1.00	75.23	0.1143	215.8213	0.031595	3.3068	0.006244	90.27251	11.28406
	07-22-2017 00	96	97	1908.1	0.4190	799.5	1.7614	3361.0	195.8	1.00	76.02	0.1143	218.0958	0.031928	3.3068	0.00631	91.2239	11.40299
	07-22-2017 01	98	95	1892.0	0.4310	815.5	1.7728	3354.1	194.1	1.00	75.38	0.1143	216.2556	0.031659	3.3068	0.006256	90.45418	11.30677
	07-22-2017 02	98	96	1906.0	0.4360	831.0	1.7640	3362.2	195.6	1.00	75.94	0.1143	217.8558	0.031893	3.3068	0.006303	91.12351	11.39044
	07-22-2017 03	99	98	1911.5	0.4570	873.6	1.7592	3362.7	196.1	1.00	76.16	0.1143	218.4845	0.031985	3.3068	0.006321	91.38645	11.42331
	07-22-2017 04	100	98	1923.3	0.4640	892.4	1.7430	3352.3	197.3	1.00	76.63	0.1143	219.8332	0.032183	3.3068	0.00636	91.9506	11.49382
	07-22-2017 05	100	98	1902.7	0.4630	881.0	1.7532	3335.8	195.2	1.00	75.80	0.1143	217.4786	0.031838	3.3068	0.006292	90.96574	11.37072
	07-22-2017 06	99	98	1906.7	0.4570	871.4	1.7482	3333.2	195.6	1.00	75.96	0.1143	217.9358	0.031905	3.3068	0.006305	91.15697	11.39462
	07-22-2017 07	98	98	1894.7	0.4540	860.2	1.7518	3319.2	194.4	1.00	75.49	0.1143	216.5642	0.031704	3.3068	0.006265	90.58327	11.32291
	07-22-2017 08	99	98	1887.6	0.4510	851.3	1.7593	3320.8	193.7	1.00	75.20	0.1143	215.7527	0.031585	3.3068	0.006242	90.24382	11.28048
	07-22-2017 09	110	106	2050.6	0.4450	912.5	1.7733	3636.4	210.4	1.00	81.70	0.1143	234.3836	0.034313	3.3068	0.006781	98.03665	12.25458
	07-22-2017 10	119	120	2272.5	0.4790	1088.5	1.7675	4016.6	233.2	1.00	90.54	0.1143	259.7468	0.038026	3.3068	0.007515	108.6454	13.58068
	07-22-2017 11	136	143	2605.7	0.4920	1282.0	1.7753	4625.9	267.3	1.00	103.81	0.1143	297.8315	0.043601	3.3068	0.008616	124.5753	15.57191
	07-22-2017 12	136	145	2610.9	0.4840	1263.7	1.7751	4634.7	267.9	1.00	104.02	0.1143	298.4259	0.043688	3.3068	0.008634	124.8239	15.60299
	07-22-2017 13	135	145	2612.6	0.4700	1227.9	1.7760	4640.1	268.1	1.00	104.09	0.1143	298.6202	0.043717	3.3068	0.008639	124.9052	15.61315
	07-22-2017 14	135	145	2605.4	0.4610	1201.1	1.7858	4652.6	267.3	1.00	103.80	0.1143	297.7972	0.043596	3.3068	0.008615	124.561	15.57012
	07-22-2017 15	136	145	2605.0	0.4570	1190.5	1.7857	4651.8	267.3	1.00	103.78	0.1143	297.7515	0.04359	3.3068	0.008614	124.5418	15.56773
	07-22-2017 16	136	145	2613.6	0.4570	1194.4	1.7804	4653.3	268.2	1.00	104.13	0.1143	298.7345	0.043734	3.3068	0.008643	124.953	15.61912
	07-22-2017 17	137	145	2648.1	0.4620	1223.4	1.7757	4702.2	271.7	1.00	105.50	0.1143	302.6778	0.044311	3.3068	0.008757	126.6024	15.8253
	07-22-2017 18	138	146	2633.0	0.4730	1245.4	1.7945	4724.9	270.1	1.00	104.90	0.1143	300.9519	0.044058	3.3068	0.008707	125.8805	15.73506
	07-22-2017 19	138	146	2658.4	0.4610	1225.5	1.8015	4789.1	272.7	1.00	105.91	0.1143	303.8551	0.044483	3.3068	0.008791	127.0948	15.88685
	07-22-2017 20	139	146	2658.9	0.4630	1231.1	1.8153	4826.7	272.8	1.00	105.93	0.1143	303.9123	0.044492	3.3068	0.008792	127.1187	15.88984
	07-22-2017 21	104	114	2038.7	0.4400	897.0	1.8129	3696.0	209.2	1.00	81.22	0.1143	233.0234	0.034114	3.3068	0.006742	97.46773	12.18347
	07-22-2017 22	99	98	1909.7	0.4010	765.8	1.8205	3476.7	195.9	1.00	76.08	0.1143	218.2787	0.031955	3.3068	0.006315	91.3004	11.41255
	07-22-2017 23	99	97	1913.2	0.4140	792.1	1.8296	3500.3	196.3	1.00	76.22	0.1143	218.6788	0.032014	3.3068	0.006327	91.46773	11.43347
	07-23-2017 00	99	97	1896.5	0.4330	821.2	1.8475	3503.7	194.6	1.00	75.56	0.1143	216.77	0.031734	3.3068	0.006271	90.66932	11.33367
	07-23-2017 01	98	97	1901.8	0.4380	833.0	1.8453	3509.3	195.1	1.00	75.77	0.1143	217.3757	0.031823	3.3068	0.006289	90.92271	11.36534
	07-23-2017 02	97	98	1874.6	0.4470	837.9	1.8776	3519.8	192.3	1.00	74.69	0.1143	214.2668	0.031368	3.3068	0.006199	89.62231	11.20279

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Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-23-2017 03	96	98	1869.4	0.4510	843.1	1.9009	3553.5	191.8	1.00	74.48	0.1143	213.6724	0.031281	3.3068	0.006182	89.37371	11.17171
	07-23-2017 04	97	98	1873.5	0.4530	848.7	1.9201	3597.3	192.2	1.00	74.64	0.1143	214.1411	0.031349	3.3068	0.006195	89.56972	11.19622
	07-23-2017 05	98	98	1878.7	0.4490	843.5	1.9529	3668.9	192.8	1.00	74.85	0.1143	214.7354	0.031436	3.3068	0.006212	89.81833	11.22729
	07-23-2017 06	98	98	1885.1	0.4500	848.3	1.9558	3686.9	193.4	1.00	75.10	0.1143	215.4669	0.031544	3.3068	0.006234	90.1243	11.26554
	07-23-2017 07	98	98	1898.5	0.4440	842.9	1.9473	3697.0	194.8	1.00	75.64	0.1143	216.9986	0.031768	3.3068	0.006278	90.76494	11.34562
	07-23-2017 08	98	98	1898.5	0.4440	842.9	1.9702	3740.5	194.8	1.00	75.64	0.1143	216.9986	0.031768	3.3068	0.006278	90.76494	11.34562
	07-23-2017 09	99	98	1899.5	0.4400	835.8	1.9808	3762.6	194.9	1.00	75.68	0.1143	217.1129	0.031784	3.3068	0.006281	90.81275	11.35159
	07-23-2017 10	113	114	2143.7	0.4500	964.7	2.0147	4319.0	219.9	1.00	85.41	0.1143	245.0249	0.035871	3.3068	0.007089	102.4876	12.81096
	07-23-2017 11	133	140	2539.3	0.5020	1274.7	2.0002	5079.2	260.5	1.00	101.17	0.1143	290.242	0.04249	3.3068	0.008397	121.4008	15.1751
	07-23-2017 12	135	147	2601.9	0.5000	1301.0	1.9985	5200.0	267.0	1.00	103.66	0.1143	297.3972	0.043538	3.3068	0.008604	124.3936	15.5492
	07-23-2017 13	135	144	2567.8	0.4920	1263.4	2.0126	5167.9	263.5	1.00	102.30	0.1143	293.4995	0.042967	3.3068	0.008491	122.7633	15.34542
	07-23-2017 14	135	144	2551.4	0.4900	1250.2	2.0219	5158.6	261.8	1.00	101.65	0.1143	291.625	0.042693	3.3068	0.008437	121.9793	15.24741
	07-23-2017 15	135	144	2576.5	0.4820	1241.9	2.0101	5179.1	264.4	1.00	102.65	0.1143	294.494	0.043113	3.3068	0.008521	123.1793	15.39741
	07-23-2017 16	128	128	2373.3	0.4640	1101.2	2.0057	4760.1	243.5	1.00	94.55	0.1143	271.2682	0.039713	3.3068	0.007848	113.4645	14.18307
	07-23-2017 17	125	119	2276.2	0.4620	1051.6	2.0218	4602.0	233.5	1.00	90.69	0.1143	260.1697	0.038088	3.3068	0.007527	108.8223	13.60279
	07-23-2017 18	125	118	2276.5	0.4610	1049.5	2.0169	4591.4	233.6	1.00	90.70	0.1143	260.204	0.038093	3.3068	0.007528	108.8367	13.60458
	07-23-2017 19	107	102	1969.0	0.4640	913.6	2.0241	3985.5	202.0	1.00	78.45	0.1143	225.0567	0.032947	3.3068	0.006511	94.13546	11.76693
	07-23-2017 20	98	98	1886.6	0.4340	818.8	2.0144	3800.3	193.6	1.00	75.16	0.1143	215.6384	0.031569	3.3068	0.006239	90.19602	11.2745
	07-23-2017 21	99	98	1891.4	0.4360	824.7	2.0136	3808.5	194.1	1.00	75.35	0.1143	216.187	0.031649	3.3068	0.006254	90.4255	11.30319
	07-23-2017 22	99	98	1896.3	0.4370	828.7	2.0147	3820.4	194.6	1.00	75.55	0.1143	216.7471	0.031731	3.3068	0.006271	90.65976	11.33247
	07-23-2017 23	97	98	1903.6	0.4390	835.7	2.0103	3826.9	195.3	1.00	75.84	0.1143	217.5815	0.031853	3.3068	0.006295	91.00876	11.3761
	07-24-2017 00	98	98	1902.0	0.4400	836.9	2.0133	3829.3	195.1	1.00	75.78	0.1143	217.3986	0.031826	3.3068	0.006289	90.93227	11.36653
	07-24-2017 01	100	96	1897.6	0.4360	827.4	2.0209	3834.8	194.7	1.00	75.60	0.1143	216.8957	0.031753	3.3068	0.006275	90.72191	11.34024
	07-24-2017 02	100	96	1903.7	0.4340	826.2	2.0271	3858.9	195.3	1.00	75.84	0.1143	217.5929	0.031855	3.3068	0.006295	91.01355	11.37669
	07-24-2017 03	100	98	1911.6	0.4420	844.9	2.0169	3855.5	196.1	1.00	76.16	0.1143	218.4959	0.031987	3.3068	0.006321	91.39124	11.4239
	07-24-2017 04	101	98	1915.4	0.4450	852.4	2.0133	3856.2	196.5	1.00	76.31	0.1143	218.9302	0.032051	3.3068	0.006334	91.57291	11.44661
	07-24-2017 05	101	98	1890.5	0.4520	854.5	2.0215	3821.7	194.0	1.00	75.32	0.1143	216.0842	0.031634	3.3068	0.006251	90.38247	11.29781
	07-24-2017 06	101	99	1891.1	0.4480	847.2	2.0245	3828.5	194.0	1.00	75.34	0.1143	216.1527	0.031644	3.3068	0.006253	90.41116	11.30139
	07-24-2017 07	101	99	1912.1	0.4430	847.1	2.0129	3848.9	196.2	1.00	76.18	0.1143	218.553	0.031995	3.3068	0.006323	91.41514	11.42689
	07-24-2017 08	101	99	1911.1	0.4410	842.8	1.9991	3820.5	196.1	1.00	76.14	0.1143	218.4387	0.031979	3.3068	0.00632	91.36733	11.42092
	07-24-2017 09	100	98	1908.8	0.4430	845.6	1.9849	3788.7	195.8	1.00	76.05	0.1143	218.1758	0.03194	3.3068	0.006312	91.25737	11.40717
	07-24-2017 10	99	98	1910.7	0.4460	852.2	1.9772	3777.8	196.0	1.00	76.12	0.1143	218.393	0.031972	3.3068	0.006318	91.34821	11.41853
	07-24-2017 11	100	102	1939.8	0.4490	871.0	1.9728	3826.9	199.0	1.00	77.28	0.1143	221.7191	0.032459	3.3068	0.006414	92.73944	11.59243
	07-24-2017 12	110	127	2230.4	0.5050	1126.4	1.9390	4324.7	228.8	1.00	88.86	0.1143	254.9347	0.037321	3.3068	0.007375	106.6327	13.32908
	07-24-2017 13	127	119	2294.7	0.4810	1103.8	1.9436	4460.0	235.4	1.00	91.42	0.1143	262.2842	0.038397	3.3068	0.007588	109.7068	13.71335
	07-24-2017 14	132	110	2248.6	0.4970	1117.6	1.9404	4363.1	230.7	1.00	89.59	0.1143	257.015	0.037626	3.3068	0.007436	107.5028	13.43785
	07-24-2017 15	134	136	2482.5	0.4950	1228.8	1.9405	4817.3	254.7	1.00	98.90	0.1143	283.7498	0.04154	3.3068	0.008209	118.6853	14.83566
	07-24-2017 16	130	112	2250.5	0.4300	967.7	1.9401	4366.1	230.9	1.00	89.66	0.1143	257.2322	0.037658	3.3068	0.007442	107.5936	13.4492
	07-24-2017 17	127	124	2333.5	0.4930	1150.4	1.9190	4478.0	239.4	1.00	92.97	0.1143	266.7191	0.039047	3.3068	0.007716	111.5618	13.94522
	07-24-2017 18	126	127	2345.4	0.4580	1074.2	1.9245	4513.7	240.6	1.00	93.44	0.1143	268.0792	0.039246	3.3068	0.007756	112.1307	14.01633
	07-24-2017 19	120	116	2215.7	0.4600	1019.2	1.9260	4267.4	227.3	1.00	88.27	0.1143	253.2545	0.037075	3.3068	0.007327	105.9299	13.24124
	07-24-2017 20	119	114	2215.8	0.4570	1012.6	1.9260	4267.6	227.3	1.00	88.28	0.1143	253.2659	0.037077	3.3068	0.007327	105.9347	13.24183
	07-24-2017 21	119	114	2214.8	0.4640	1027.7	1.9155	4242.4	227.2	1.00	88.24	0.1143	253.1516	0.03706	3.3068	0.007324	105.8869	13.23586
	07-24-2017 22	119	114	2212.1	0.4630	1024.2	1.9081	4220.9	227.0	1.00	88.13	0.1143	252.843	0.037015	3.3068	0.007315	105.7578	13.21972
	07-24-2017 23	109	116	2110.6	0.4190	884.3	1.8378	3878.8	216.5	1.00	84.09	0.1143	241.2416	0.035317	3.3068	0.006979	100.9052	12.61315
	07-25-2017 00	110	131	2178.5	0.4010	873.6	1.7348	3779.3	223.5	1.00	86.79	0.1143	249.0026	0.036453	3.3068	0.007204	104.1514	13.01892
	07-25-2017 01	111	130	2190.3	0.4030	882.7	1.7315	3792.6	224.7	1.00	87.25	0.1143	250.3513	0.03665	3.3068	0.007243	104.7155	13.08944

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-25-2017 02	87	129	1972.3	0.3870	763.3	1.7205	3393.4	202.4	1.00	78.58	0.1143	225.4339	0.033003	3.3068	0.006522	94.29323	11.78665
	07-25-2017 03	84	122	1878.3	0.3470	651.8	1.7046	3201.8	192.7	1.00	74.83	0.1143	214.6897	0.03143	3.3068	0.006211	89.7992	11.2249
	07-25-2017 04	85	110	1790.5	0.2990	535.4	1.6993	3042.6	183.7	1.00	71.33	0.1143	204.6542	0.029961	3.3068	0.005921	85.60159	10.7002
	07-25-2017 05	86	112	1800.4	0.3230	581.5	1.6822	3028.7	184.7	1.00	71.73	0.1143	205.7857	0.030126	3.3068	0.005954	86.0749	10.75936
	07-25-2017 06	81	94	1634.7	0.2870	469.2	1.6193	2647.1	167.7	1.00	65.13	0.1143	186.8462	0.027354	3.3068	0.005406	78.15299	9.769124
	07-25-2017 07	70	56	1292.6	0.2970	383.9	1.5243	1970.3	132.6	1.00	51.50	0.1143	147.7442	0.021629	3.3068	0.004274	61.79761	7.724701
	07-25-2017 08	47	31	865.4	0.3070	265.7	1.2999	1124.9	88.8	1.00	34.48	0.1143	98.91522	0.014481	3.3068	0.002862	41.37371	5.171713
	07-25-2017 09	41	34	850.3	0.3010	255.9	1.3478	1146.0	87.2	1.00	33.88	0.1143	97.18929	0.014228	3.3068	0.002812	40.65179	5.081474
	07-25-2017 10	48	44	1000.2	0.2570	257.1	1.3904	1390.7	102.6	1.00	39.85	0.1143	114.3229	0.016736	3.3068	0.003307	47.81833	5.977291
	07-25-2017 11	49	44	1021.1	0.2500	255.3	1.3962	1425.7	104.8	1.00	40.68	0.1143	116.7117	0.017086	3.3068	0.003377	48.81753	6.102191
	07-25-2017 12	50	16	729.0	0.2030	148.0	1.3468	981.8	74.8	1.00	29.04	0.1143	83.3247	0.012198	3.3068	0.002411	34.85259	4.356574
	07-25-2017 13	49	0	505.9	0.1320	66.8	1.3428	679.3	51.9	1.00	20.16	0.1143	57.82437	0.008465	3.3068	0.001673	24.18645	3.023307
	07-25-2017 14	5	0	62.9	0.1300	8.2	1.2823	80.7	6.4	0.13	2.51	0.1143	7.19027	0.001053	3.3068	0.000208	3.007506	0.375938
	07-25-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-25-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-25-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-25-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-25-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-25-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-25-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-25-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-25-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-26-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-27-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-27-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-28-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-29-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-29-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-30-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	07-30-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	07-31-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-01-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-01-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-02-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-03-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-03-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-04-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-05-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-05-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-06-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Stack Emission Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-07-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-07-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-08-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-09-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-09-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-10-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-11-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-11-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-12-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-13-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-13-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-14-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-15-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-15-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-16-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-17-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-17-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-18-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-19-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-19-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-20-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-21-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-21-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-21-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-21-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-21-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-21-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-21-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-21-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-21-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-21-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-21-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-21-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-21-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
TRUE	08-21-2017 13	0	0	17.9	0.0047	0.1	0.0000	0.0	1.3	0.80	0.68	0.1143	1.947672	0.000285	3.3068	5.63E-05	0.814661	0.101833
TRUE	08-21-2017 14	0	0	117.2	0.0324	3.4	0.0435	3.1	12.0	1.00	4.67	0.1143	13.39596	0.001961	3.3068	0.000388	5.603187	0.700398
	08-21-2017 15	0	0	322.0	0.3000	96.6	1.0957	352.8	33.0	1.00	12.83	0.1143	36.8046	0.005388	3.3068	0.001065	15.39442	1.924303
TRUE	08-21-2017 16	0	0	222.4	0.0641	14.8	0.8675	201.6	23.3	1.00	9.26	0.1143	26.56332	0.003889	3.3068	0.000768	11.11076	1.388845
	08-21-2017 17	0	0	96.6	0.0414	4.0	0.0631	6.1	9.9	1.00	3.85	0.1143	11.04138	0.001616	3.3068	0.000319	4.618327	0.577291
	08-21-2017 18	0	0	108.8	0.0441	4.8	0.0570	6.2	11.2	1.00	4.33	0.1143	12.43584	0.001821	3.3068	0.00036	5.201594	0.650199
	08-21-2017 19	0	0	60.2	0.0323	1.9	0.0601	3.6	6.2	0.67	2.40	0.1143	6.884632	0.001008	3.3068	0.000199	2.879665	0.359958
	08-21-2017 20	0	0	109.9	0.0409	4.5	0.0528	6.9	11.3	1.00	4.38	0.1143	12.56157	0.001839	3.3068	0.000363	5.254183	0.656773
	08-21-2017 21	0	0	100.6	0.0388	3.9	0.0626	6.3	10.3	1.00	4.01	0.1143	11.49858	0.001683	3.3068	0.000333	4.809562	0.601195
	08-21-2017 22	0	0	123.8	0.0436	5.4	0.0719	8.9	12.7	1.00	4.93	0.1143	14.15034	0.002072	3.3068	0.000409	5.918725	0.739841
	08-21-2017 23	0	0	147.5	0.0508	7.5	0.0705	10.4	15.1	1.00	5.88	0.1143	16.85925	0.002468	3.3068	0.000488	7.051793	0.881474
	08-22-2017 00	0	0	136.8	0.0490	6.7	0.0738	10.1	14.0	1.00	5.45	0.1143	15.63624	0.002289	3.3068	0.000452	6.540239	0.81753
	08-22-2017 01	0	0	147.2	0.0577	8.5	0.1365	20.1	15.1	1.00	5.86	0.1143	16.82496	0.002463	3.3068	0.000487	7.03745	0.879681
	08-22-2017 02	0	9	264.7	0.3121	82.6	0.8999	238.2	27.2	1.00	10.55	0.1143	30.25521	0.004429	3.3068	0.000875	12.65498	1.581873
	08-22-2017 03	0	39	515.8	0.4170	215.1	1.3402	691.3	52.9	1.00	20.55	0.1143	58.95594	0.008631	3.3068	0.001706	24.65976	3.08247
	08-22-2017 04	0	90	938.0	0.4751	445.6	1.5916	1492.9	96.2	1.00	37.37	0.1143	107.2134	0.015696	3.3068	0.003102	44.84462	5.605578
	08-22-2017 05	0	106	1062.1	0.4820	511.9	1.7237	1830.7	109.0	1.00	42.31	0.1143	121.398	0.017772	3.3068	0.003512	50.77769	6.347211
	08-22-2017 06	0	117	1139.3	0.4550	518.4	1.7341	1975.7	116.9	1.00	45.39	0.1143	130.222	0.019064	3.3068	0.003767	54.46853	6.808566
	08-22-2017 07	0	116	1132.3	0.4680	529.9	1.7384	1968.4	116.2	1.00	45.11	0.1143	129.4219	0.018947	3.3068	0.003744	54.13386	6.766733
	08-22-2017 08	0	110	1092.3	0.4950	540.7	1.7301	1889.8	112.1	1.00	43.52	0.1143	124.8499	0.018278	3.3068	0.003612	52.22151	6.527689
	08-22-2017 09	0	95	896.4	0.4550	407.9	1.5687	1406.2	92.0	1.00	35.71	0.1143	102.4585	0.015	3.3068	0.002964	42.85578	5.356972
	08-22-2017 10	0	117	1139.6	0.4630	527.6	1.7194	1959.4	116.9	1.00	45.40	0.1143	130.2563	0.019069	3.3068	0.003768	54.48287	6.810359
	08-22-2017 11	0	119	1135.8	0.4960	563.4	1.7572	1995.8	116.5	1.00	45.25	0.1143	129.8219	0.019005	3.3068	0.003756	54.3012	6.787649
	08-22-2017 12	0	120	1136.9	0.4990	567.3	1.7721	2014.7	116.6	1.00	45.29	0.1143	129.9477	0.019024	3.3068	0.003759	54.35378	6.794223
	08-22-2017 13	0	116	1113.3	0.4960	552.2	1.7484	1946.5	114.2	1.00	44.35	0.1143	127.2502	0.018629	3.3068	0.003681	53.2255	6.653187
	08-22-2017 14	0	107	1037.3	0.5070	525.9	1.7372	1802.0	106.4	1.00	41.33	0.1143	118.5634	0.017357	3.3068	0.00343	49.59203	6.199004
	08-22-2017 15	0	114	1092.8	0.5130	560.6	1.7651	1928.9	112.1	1.00	43.54	0.1143	124.907	0.018286	3.3068	0.003614	52.24542	6.530677
	08-22-2017 16	0	114	1102.5	0.5120	564.5	1.7378	1915.9	113.1	1.00	43.92	0.1143	126.0158	0.018448	3.3068	0.003646	52.70916	6.588645
	08-22-2017 17	0	111	1068.9	0.5180	553.7	1.7626	1884.0	109.7	1.00	42.59	0.1143	122.1753	0.017886	3.3068	0.003535	51.10279	6.387849
	08-22-2017 18	0	103	1028.1	0.5080	522.3	1.7462	1795.3	105.5	1.00	40.96	0.1143	117.5118	0.017203	3.3068	0.0034	49.15219	6.144024
	08-22-2017 19	0	111	1079.8	0.4820	520.5	1.7459	1885.2	110.8	1.00	43.02	0.1143	123.4211	0.018068	3.3068	0.003571	51.6239	6.452988
	08-22-2017 20	0	102	1029.5	0.4970	511.7	1.6336	1681.8	105.6	1.00	41.02	0.1143	117.6719	0.017227	3.3068	0.003404	49.21912	6.15239
	08-22-2017 21	0	80	802.4	0.3870	310.5	1.5735	1262.6	82.3	1.00	31.97	0.1143	91.71432	0.013427	3.3068	0.002653	38.36175	4.795219
	08-22-2017 22	0	78	812.2	0.4270	346.8	1.5978	1297.7	83.3	1.00	32.36	0.1143	92.83446	0.013591	3.3068	0.002686	38.83028	4.853785
	08-22-2017 23	0	80	820.9	0.4460	366.1	1.6109	1322.4	84.2	1.00	32.71	0.1143	93.82887	0.013736	3.3068	0.002715	39.24622	4.905777
	08-23-2017 00	0	37	482.9	0.4369	211.0	1.3817	667.2	49.5	1.00	19.24	0.1143	55.19547	0.00808	3.3068	0.001597	23.08685	2.885857
	08-23-2017 01	0	27	443.3	0.4360	193.3	1.3354	592.0	45.5	1.00	17.66	0.1143	50.66919	0.007418	3.3068	0.001466	21.19363	2.649203
	08-23-2017 02	0	27	440.6	0.4380	193.0	1.3416	591.1	45.2	1.00	17.55	0.1143	50.36058	0.007373	3.3068	0.001457	21.06454	2.633068
	08-23-2017 03	0	27	439.8	0.4411	194.0	1.3454	591.7	45.1	1.00	17.52	0.1143	50.26914	0.007359	3.3068	0.001454	21.02629	2.628287
	08-23-2017 04	0	28	450.9	0.4440	200.2	1.3267	598.2	46.3	1.00	17.96	0.1143	51.53787	0.007545	3.3068	0.001491	21.55697	2.694622
	08-23-2017 05	0	30	475.5	0.4551	216.4	1.2757	606.6	48.8	1.00	18.94	0.1143	54.34965	0.007957	3.3068	0.001572	22.73307	2.841633
	08-23-2017 06	0	31	478.5	0.4539	217.2	1.2725	608.9	49.1	1.00	19.06	0.1143	54.69255	0.008007	3.3068	0.001582	22.87649	2.859562
	08-23-2017 07	0	24	375.4	0.4600	172.7	1.2684	476.2	38.5	0.78	14.96	0.1143	42.90982	0.006282	3.3068	0.001241	17.94808	2.24351
	08-23-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 Lb/mmBtu	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-23-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-23-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-24-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

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Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-25-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-25-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-26-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-27-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-27-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-28-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-29-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-29-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-30-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	08-31-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	08-31-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-01-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-02-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-02-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-03-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-04-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-04-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-05-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-06-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-06-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-07-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-08-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-08-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-09-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-10-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-10-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-11-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Source/Unit/Zone Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-12-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-12-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-13-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-14-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-14-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-15-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-15-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-16-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-17-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-17-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-18-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YF01 Gross Load MW Value	YF02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-19-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-19-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-20-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Source/Unit Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-21-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-21-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-22-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-23-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-23-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-24-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-25-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-25-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-26-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-27-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-27-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-28-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Subscription Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	09-29-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-29-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	09-30-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-01-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-01-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-02-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-03-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-03-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-04-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-05-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-05-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-06-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-07-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-07-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-08-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-09-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-09-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-10-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-11-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-11-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-12-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-13-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-13-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-14-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-15-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-15-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-16-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-17-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-17-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-18-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-19-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-19-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-20-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-21-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-21-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-22-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-23-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-23-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-24-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Submitted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-25-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 16	0	0	2.0	0.0000	0.0	0.0294	0.1	0.2	0.20	0.08	0.1143	0.233172	3.41E-05	3.3068	6.75E-06	0.09753	0.012191
	10-25-2017 17	0	0	10.6	0.0000	0.0	0.0566	0.6	1.1	1.00	0.42	0.1143	1.21158	0.000177	3.3068	3.51E-05	0.506773	0.063347
	10-25-2017 18	0	0	11.0	0.0000	0.0	0.0273	0.3	1.1	1.00	0.44	0.1143	1.2573	0.000184	3.3068	3.64E-05	0.525896	0.065737
	10-25-2017 19	0	0	21.8	0.0043	0.1	0.0128	0.3	2.2	0.93	0.87	0.1143	2.487397	0.000364	3.3068	7.2E-05	1.040414	0.130052
	10-25-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-25-2017 22	0	0	11.4	0.0044	0.1	0.0088	0.1	1.2	0.50	0.45	0.1143	1.297305	0.00019	3.3068	3.75E-05	0.542629	0.067829
	10-25-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-26-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-27-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-27-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-28-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-29-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-29-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-30-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

x

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Supplemental Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	10-31-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	10-31-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-01-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/Hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-01-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-02-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-03-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-03-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-04-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-05-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-05-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-06-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substantiated Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-07-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-07-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-08-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-09-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-09-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-10-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-11-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-11-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-12-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substation Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-13-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-13-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-14-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-15-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-15-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-16-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/Hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-17-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-17-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-18-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-19-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-19-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-20-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
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Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-21-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-21-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-22-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Date	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-23-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-23-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-24-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

Substituted Data	Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack NOx Lb/mmBtu	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCl (lb/hr)	HF (lb/hr)
	11-25-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-25-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 00	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 01	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 02	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 03	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 04	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 05	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 08	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 09	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 10	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 11	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 12	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 14	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 15	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 16	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 17	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 18	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 19	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 20	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 21	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 22	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
	11-26-2017 23	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1143	0	0	0.0000	0	0	0
				6708928.3		1556.67		6030.98	688334.7	Total Tons	267287.98		342.67	0.056		0.011	160.37	20.05
				mmBtu														

Note:

All data are collected and processed in accordance with Part 75.

Data with orange fill are substituted in accordance with Part 75.

Monthly sums may not agree with data published by EPA due to the handling of quarterly and annual totals.

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Law Department
120 Tredegar Street, Richmond, VA 23219
DominionEnergy.com



Michael Regulinski
Managing General Counsel
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December 1, 2017

The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4

Dear Secretary Perry:

As requested by DOE staff and pursuant to Order No. 202-17-4 (the "Order") issued on September 14, 2017 by the Secretary of Energy ("Secretary"), PJM Interconnection, LLC ("PJM") and Virginia Electric and Power Company ("Dominion Energy Virginia") respectfully submits the attached spreadsheet (Attachment 1) that reflects historical operations and emissions data for Yorktown Units 1 and 2 for the years 2015-2017. As requested by the DOE staff, the spreadsheet provides the same categories of information and in the same format used in Attachment 3 of the September 28, 2017 Report on Yorktown Units 1 and 2 operations. The spreadsheet is provided in accordance with the Secretary's directive to report all dates on which Yorktown Units 1 and 2 are operated as well as the estimated emissions associated with their operations.¹

Attachment 1 shows the actual runtime and air emissions data for the period, and includes hourly runtime data for the equipment for the Yorktown units, and raw and calculated data showing emissions data associated with operations of the equipment. The information reports hourly emissions of PM-10 and SO₂ in pounds per hour and pounds per million BTU, and mercury in pounds per hour and pounds per trillion BTU (Mercury and Air Toxics Standards (MATS) format) for the operating period beginning

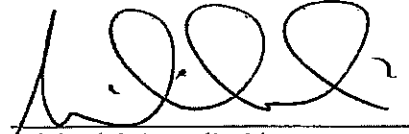
¹ Order at page 2.

January 1, 2015, through November 26, 2017. Additionally, Attachment 1 provides hourly emissions of NO_x in pounds per hour, greenhouse gases (as CO₂) in tons per hour, lead in pounds per hour, HCl in pounds per hour, HF in pounds per hour, and CO in pounds per hour. NO_x and SO₂ emissions are based on valid hours of Continuous Emissions Monitoring System (CEMS) data for the period. For the period beginning July 21, 2017, through November 26, 2017, PM-10 emissions are based on the emission factor derived from the July 21, 2017, stack test (0.0168 lbs/mmBtu corrected to 0.1143 lbs/mmBtu calculated for PM-10 filterable plus condensable). For the period beginning June 3, 2015, through July 20, 2017, PM-10 emissions are based on the emission factor derived from the June 3, 2015, stack test (0.015 lbs/mmBtu corrected to 0.087 lbs/mmBtu calculated for PM-10 filterable plus condensable). For the period beginning January 1, 2015, through June 2, 2015, PM-10 emissions are based on the emission factor derived from the July 29, 2014, stack test (0.035 lbs/mmBtu corrected to 0.1255 lbs/mmBtu calculated for PM-10 filterable plus condensable). CO₂ emissions are based on valid CEMS hours for the operating period. All other emissions were calculated using emission factors from AP-42, Fifth Edition, Volume 1, Chapter 1: External Combustion Sources and calculated hourly coal consumption in tons.²

PJM and Dominion Energy Virginia respectfully submits the information in this report be accepted by the Secretary as compliant with the Order's directives to report all dates on which Yorktown Units 1 and 2 are operated well as the estimated and actual emissions associated with their operations.

² Mercury and lead emissions were calculated using AP-42, Table 1.1-18. CO emissions were calculated using emission factors from AP-42, Table 1.1-3. Total HAP metals and individual HAP metals are not provided because MATS Table 2 (40 CFR 63, Subpart UUUUU) provides for compliance with either the PM limit or total non-mercury HAP metals limits or individual HAP metals. Dominion Energy Virginia is providing PM-10 emissions for the purposes of MATS. HCl and HF emissions were calculated using emission factors from AP-42, Table 1.1-15.

Respectfully submitted,



Michael C. Regulinski
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955 Jefferson Avenue
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Phone: 610-666-4370
Email: pincus@pjm.com

cc: Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Casey Roberts, Sierra Club Environmental Law Program

From: Konieczny, Katherine
To: Batra, Rakesh
Subject: FW: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4
Date: Monday, December 04, 2017 3:57:17 PM

Rakesh, I cannot find this 10/21 report. Will you please forward it to me?

Thanks,

Kathy

From: Michael Regulinski (Services - 6)
Sent: Thursday, October 12, 2017 4:39 PM
To: The.Secretary@hq.doe.gov; Hoffman, Patricia; Catherine.Jereza@HQ.DOE.GOV; Batra, Rakesh; Katherine.Konieczny@HQ.DOE.GOV
Cc: 'Pincus, Steven'; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Burlew, James M.; Mohammed Alfayyumi (VirginiaPower - 1T) (mohammed.alfayyumi@dominionenergy.com); Mike Barmer (VirginiaPower - 1T)
Subject: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4
Confidential Contains CEII Material

Dear Secretary Perry:

PJM Interconnection, LLC and Virginia Electric and Power Company, dba Dominion Energy Virginia, respectfully submit the following in compliance with Order No. 202-17-4:

1. Report on Yorktown Units 1 and 2 Revised Construction Schedule;
2. Public version of Skiffes Creek outages table (CEII material redacted); and
3. Non-Public version of Skiffes Creek outages table (password protected contains CEII material).

Please contact me if you have any questions.

Michael C. Regulinski

Managing General Counsel

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From: Konieczny, Katherine
To: Batra, Rakesh
Subject: RE: Order No. 202-17-4 Compliance Filing Re: Dominion Yorktown Units Two Week Report on Yorktown Units Operations; Confidential Contains CEII Material
Date: Monday, December 04, 2017 4:26:53 PM

I meant 10/12. I have an email from Dominion with the password for the materials but can't locate the email with the 10/12 attachments.

From: Konieczny, Katherine
Sent: Monday, December 04, 2017 4:07 PM
To: Batra, Rakesh
Subject: RE: Order No. 202-17-4 Compliance Filing Re: Dominion Yorktown Units Two Week Report on Yorktown Units Operations; Confidential Contains CEII Material
 It would be from 10/21, not 9/28. Do you have that one?

From: Batra, Rakesh
Sent: Monday, December 04, 2017 4:00 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Subject: FW: Order No. 202-17-4 Compliance Filing Re: Dominion Yorktown Units Two Week Report on Yorktown Units Operations; Confidential Contains CEII Material

From: Pincus, Steven [<mailto:Steven.Pincus@pjm.com>]
Sent: Thursday, September 28, 2017 3:54 PM
To: Secretary Perry <The.Secretary@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Cc: Michael Regulinski (Services - 6) <michael.regulinski@dominionenergy.com>; Bryson, Mike E. <Michael.Bryson@pjm.com>; Souder, David W. <David.Souder@pjm.com>; Tam, Simon K. <Simon.Tam@pjm.com>; Glazer, Craig <Craig.Glazer@pjm.com>; O'Hara, Chris <Chris.OHara@pjm.com>; Burlew, James M. <James.Burlew@pjm.com>
Subject: Order No. 202-17-4 Compliance Filing Re: Dominion Yorktown Units Two Week Report on Yorktown Units Operations; Confidential Contains CEII Material

Confidential Contains CEII Material

Dear Secretary Perry:

PJM respectfully submitted the following in compliance with Order No. 202-17-4:

1. Public version of the first two week report on Yorktown Units 1 and 2 Operations (Attachment 4 with CEII material redacted); and
2. Non-Public version of the two week report (password protected because Attachment 4 contains CEII material).

Attachments 1, 2, 3 and 5 to the letter are in Excel format attached separately to this email. Please contact me if you have any questions.

Thank you.

Respectfully,

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

From: Michael Regulinski
To: Batra, Rakesh
Subject: FW: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4
Date: Thursday, December 07, 2017 9:33:04 AM
Attachments: PUBLIC Skiffes Creek outages table 100917 tdb emissions updates 10102017.pdf
Encrypted Non-Public Confidential CEII.zip
DOE Report Updated Outages 10 12 17.pdf

As requested.

Michael C. Regulinski
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michael.regulinski@dominionenergy.com

From: Michael Regulinski (Services - 6)
Sent: Thursday, October 12, 2017 4:39 PM
To: The.Secretary@hq.doe.gov; Hoffman, Patricia; Catherine.Jereza@HQ.DOE.GOV; Batra, Rakesh; Katherine.Konieczny@HQ.DOE.GOV
Cc: 'Pincus, Steven'; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Burlew, James M.; Mohammed Alfayyumi (VirginiaPower - 1T) (mohammed.alfayyumi@dominionenergy.com); Mike Barmer (VirginiaPower - 1T)
Subject: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4

Confidential Contains CEII Material

Dear Secretary Perry:
PJM Interconnection, LLC and Virginia Electric and Power Company, dba Dominion Energy Virginia, respectfully submit the following in compliance with Order No. 202-17-4:

1. Report on Yorktown Units 1 and 2 Revised Construction Schedule;
2. Public version of Skiffes Creek outages table (CEII material redacted); and
3. Non-Public version of Skiffes Creek outages table (password protected contains CEII material).

Please contact me if you have any questions.

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PUBLIC VERSION

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (subject to change)

Outage	Outage Time Frame	Limiting Contingency	Load Threshold	Hours over Load Threshold**	Days over load threshold **	Dominion Emissions Estimates
Redacted information is CEII	7/9/17-9/29/17	Redacted information is CEII	>18,400 MW	87	18	NOx 243.06 SO2 933.11 PM10 52.62 CO2 122,385.60 Pb 0.0100 Hg 0.0015 HCl 22.01 HF 3.56 CO 11.88
Redacted information is CEII	1/2/18 – 2/9/18	Redacted information is CEII	>18,100 MW	5	2	NOx 27.01 SO2 103.68 PM10 5.85 CO2 13,598.40 Pb 0.0011 Hg 0.0002 HCl 2.45 HF 0.40 CO 1.32
Redacted information is CEII	9/29/17-10/27/17	Redacted information is CEII	>17,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
Redacted information is CEII	10/30/17-02/16/18	Redacted information is CEII	>17,200 MW	20	6	NOx 81.02 SO2 311.04 PM10 17.54 CO2 40,795.20 Pb 0.0033 Hg 0.0005 HCl 7.34 HF 1.19 CO 3.96
Redacted information is CEII	2/5/18 – 5/4/18	Redacted information is CEII	>18,000 MW	1	1	NOx 13.50 SO2 51.84 PM10 2.92 CO2 6,799.20 Pb 0.0006 Hg 0.0001

PUBLIC VERSION

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (subject to change)

						HCl 1.22 HF 0.20 CO 0.66
Redacted information is CEII	10/27/17 – 10/30/17	Redacted information is CEII	1 unit > 12,000 MW 2 units > 14,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
Redacted information is CEII	2/19/18-3/31/18	Redacted information is CEII	1 unit > 14,400 MW, 2 units > 16,400 MW	4	0	NOx 13.50 SO2 51.84 PM10 2.92 CO2 6,799.20 Pb 0.0006 Hg 0.0001 HCl 1.22 HF 0.20 CO 0.66
Redacted information is CEII	4/2/18 – 4/28/18	Redacted information is CEII	>13,000 MW	2	1	NOx 13.50 SO2 51.84 PM10 2.92 CO2 6,799.20 Pb 0.0006 Hg 0.0001 HCl 1.22 HF 0.20 CO 0.66
Redacted information is CEII	4/2/18 - 4/28/18	Redacted information is CEII	>18,000 MW	0	0	
Redacted information is CEII	4/30/18 – 6/9/18	Redacted information is CEII	1 unit > 12,000 MW, 2 units > 14,000 MW	160 59	16 10	NOx 216.05 SO2 829.43 PM10 46.77 CO2 108,787.20 Pb 0.0089 Hg 0.0014 HCl 19.56 HF 3.17 CO 10.56
Redacted information is CEII	5/21/18 -9/23/18	Redacted information is CEII	>18,000 MW	88	17	NOx 229.56 SO2 881.27 PM10 49.69 CO2 115,586.40 Pb 0.0094 Hg 0.0014

PUBLIC VERSION

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (subject to change)

						HCl 20.79 HF 3.37 CO 11.22
Redacted information is CEII	9/16-18-11/2/18	Redacted information is CEII	1 unit > 12,000 MW 2 units > 14,000 MW	117 14	14 3	NOx 189.05 SO2 725.75 PM10 40.92 CO2 95,188.80 Pb 0.0078 Hg 0.0012 HCl 17.12 HF 2.77 CO 9.24
Redacted information is CEII	3/11/19-6/2/19	Redacted information is CEII	>17,200 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
Redacted information is CEII	3/11/19-3/17/19	Redacted information is CEII	>13,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
Redacted information is CEII	3/11/19-5/12/19	Redacted information is CEII	>18,100 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
Redacted information is CEII	3/18/19-3/24/19	Redacted information is CEII	1 unit > 14,400 MW, 2 units > 16,400MW	0	0 0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0

PUBLIC VERSION

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (subject to change)

						CO 0.0
Redacted information is CEII	3/25/19-3/31/19	Redacted information is CEII	>18,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
Redacted information is CEII	4/1/19-4/7/19	Redacted information is CEII	>18,100 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
Redacted information is CEII	4/8/19-4/14/19	Redacted information is CEII	>18,100 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
			Total Estimate	557	89	NOx 1201.80 SO2 4613.72 PM10 260.16 CO2 605,128.80 Pb 0.0493 Hg 0.0075 HCl 108.82 HF 17.62 CO 58.75

*Outages scheduled to complete 5/12/2019.

** Estimates are for both Yorktown 1 & 2 units.

PUBLIC VERSION

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (subject to change)

		07-2017	08-2017	09-2017	10-2017	11-2017	12-2017	01-2018	02-2018	03-2018	04-2018	05-2018	06-2018	07-2018	08-2018	09-2018	10-2018	11-2018	12-2018
Days over load threshold **		9	9	0	0	0	1	6	3	0	1	11	15	8	9	13	4	0	0
Hours over Load Threshold *		39	48	0	0	0	3	18	9	0	2	95	124	43	45	105	26	0	0
Dominion Emission Estimates (tons)	NOx	97.89	8.0	0.0	0.0	0.0	13.50	81.02	40.51	0.0	13.50	148.54	202.55	108.03	121.53	175.54	54.01	0.0	0.0
	SO2	891.87	20.8	0.0	0.0	0.0	51.84	311.04	155.51	0.0	51.84	570.23	777.59	414.72	466.56	673.91	207.36	0.0	0.0
	PM10	3.72	1.53	0.0	0.0	0.0	2.92	17.54	8.77	0.0	2.92	32.15	43.85	23.39	26.31	38.00	11.69	0.0	0.0
	CO2	49,173.9	2741.4	-	-	-	6,799.2	40,795.2	20,397.6	-	6,799.2	74,791.2	101,988	54,393.6	61,192.8	88,389.6	27,196.8	-	-
	Pb	0.0040	0.00561	0.0	0.0	0.0	0.0006	0.0033	0.0017	0.0	0.0006	0.0061	0.0083	0.0044	0.0050	0.0072	0.0022	0.0	0.0
	Hg	0.0008	0.00004	0.0	0.0	0.0	0.0001	0.0005	0.0003	0.0	0.0001	0.0009	0.0013	0.0007	0.0008	0.0011	0.0003	0.0	0.0
	HCl	11.48	0.6387	0.0	0.0	0.0	1.22	7.34	3.67	0.0	1.22	13.45	18.34	9.78	11.00	15.89	4.89	0.0	0.0
	HF	1.43	0.07984	0.0	0.0	0.0	0.20	1.19	0.59	0.0	0.20	2.18	2.97	1.58	1.78	2.57	0.79	0.0	0.0
	CO	4.78	0.26614	0.0	0.0	0.0	0.66	3.96	1.98	0.0	0.66	7.26	9.90	5.28	5.94	8.58	2.64	0.0	0.0

		01-2019	02-2019	03-2019	04-2019	05-2019
Days over load threshold **		0	0	0	0	0
Hours over Load Threshold **		0	0	0	0	0
Dominion Emission Estimates (tons)	NOx	0.0	0.0	0.0	0.0	0.0
	SO2	0.0	0.0	0.0	0.0	0.0
	PM10	0.0	0.0	0.0	0.0	0.0
	CO2	-	-	-	-	-
	Pb	0.0	0.0	0.0	0.0	0.0

PUBLIC VERSION

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (subject to change)

	Hg	0.0	0.0	0.0	0.0	0.0
	HCl	0.0	0.0	0.0	0.0	0.0
	HF	0.0	0.0	0.0	0.0	0.0
	CO	0.0	0.0	0.0	0.0	0.0

Figures highlighted in green are actual emission data for the month

Dominion Energy Services, Inc.
Law Department
120 Tredegar Street, Richmond, VA 23219
DominionEnergy.com



Michael Regulinski
Managing General Counsel
(804) 819 2794 phone
(804) 819 2183 fax
michael.regulinski@dominionenergy.com

October 12, 2017

The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

**Re: Report on Yorktown Units 1 and 2 Revised Construction Schedule –
Order No. 202-17-4**

Dear Secretary Perry:

Pursuant to Order No. 202-17-4 (the “Renewal Order”) issued on September 14, 2017, by the Secretary of Energy (“Secretary”), PJM Interconnection, L.L.C. (“PJM”) and Virginia Electric and Power Company (“Dominion Energy Virginia”) respectfully submit the attached Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (“Outage Schedule”). This submission is in accordance with the Secretary’s directive that PJM and Dominion Energy Virginia provide an updated outage schedule and associated Yorktown Units 1 and 2 emission estimates in the event the schedule or emission estimates change from those presented in the PJM Renewal Application Filing dated August 24, 2017 (“Renewal Application”).¹

Previously, on June 16, 2017 the Secretary issued Order No. 202-17-2 directing the operation of Yorktown Units 1 and/or 2 only as needed to ensure reliability for a 90 day period, subject to a dispatch methodology submitted to the Department of Energy (“DOE”) for review

¹ Renewal Order at 2. The Renewal Order directs that every two weeks PJM and Dominion shall report the dates and associated emissions that the Yorktown Units 1 and/or 2 are operated, but does not specify the time to report changes to the Outage Schedule and estimated associated emissions. Nevertheless, this report is filed at the end of the second two week period after the Renewal Order was issued.

(“Order”).² PJM filed for an extension of the Order on August 24 asserting that there is a continuing emergency in the North Hampton Roads area of the Virginia Peninsula and asked DOE to renew the Order for an additional 90 days.

In the Renewal Application, PJM explained that construction of the Skiffes Creek Transmission Project began in July 10 2017 and is expected to take approximately 18-20 months.³ The Renewal Application provided the then current Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of August 18, 2017. The schedule included a construction schedule and planned transmission outage sequence, and Yorktown run and emission estimates. The schedule also provided actual emissions from the July 11-25 Yorktown unit runs, and the current estimated planned transmission outage time frames, transmission limiting contingencies, Dominion Zone load thresholds which trigger the need to operate Yorktown Units 1 and/or 2, estimated run time in days, and Dominion Energy Virginia’s estimated emissions for the remainder of the Order period based on the run time estimates. The Renewal Application explained that “the construction schedule will likely change...” and PJM and Dominion Energy Virginia would provide DOE with revised construction schedules and estimated emissions with each renewal application under the Order.⁴

In the Renewal Order, the DOE determined that an emergency exists due to the shortage of electric energy and the shortage of facilities for the generation and transmission of electric energy.⁵ The DOE also determined an emergency exists due to the imminent possibility of implementing the North Hampton Remedial Action Scheme (“RAS”) under a range of both steady-state and contingency events, including potential transmission congestion preventing the delivery of available generation to the North Hampton Roads area.⁶ For these reasons, the Secretary found that an emergency exists threatening imminent electric energy shortages, and that the Renewal Order is

² Order at 2.

³ Renewal Application at 3.

⁴ Renewal Application at 4.

⁵ Renewal Order at 1.

⁶ Summary of Findings DOE Order No. 202-17-4 at 7.

necessary to address the emergency and serve the public interest in the North Hampton Roads area.⁷ The Renewal Order also directed PJM and Dominion Energy Virginia to provide an updated outage schedule and associated Yorktown Units 1 and 2 emission estimates in the event the outage schedule or emission estimates change from those presented in the PJM Renewal Application.⁸

The attached Outage Schedule includes a revised construction schedule and planned transmission outage sequence, and Yorktown run and emission estimates. The Outage Schedule also provides actual emissions from the July 11-25 and August 21-23 Yorktown unit runs, and the current estimated planned transmission outage time frames, transmission limiting contingencies, Dominion Zone load thresholds which trigger the need to operate Yorktown Units 1 and/or 2, estimated run time in days, and Dominion Energy Virginia's estimated emissions for the remainder of the schedule based on the run time estimates.

The planned transmission outages are coordinated between PJM and Dominion Energy Virginia to ensure the reliability of service in the area and to support the Skiffes Creek construction schedule. Dominion Energy Virginia management in consultation with PJM revised the construction schedule after further review and meetings with its contractors regarding the Time of Year ("TOY") restrictions imposed by the Virginia Marine Resources Commission ("VMRC") and the U.S. Army Corps of Engineers ("Corps"). The TOY restrictions are imposed to minimize impacts of the installation of transmission tower foundations on anadromous fish species. The TOY restrictions limit the dates Dominion Energy Virginia can install foundations for the transmission towers to be located in the James River. VMRC prohibits the installation of foundations in the shallow waters of the James River between February 15 to June 15 of any given year, and the Corps prohibits the installation of foundations in the deep waters of the James River between February 15 and November 15 of any given year. Collectively, VMRC and Corps TOY restrictions prevent the installation of foundations in a continuous fashion, and finished foundations are needed to erect structures and start

⁷ Renewal Order at 1.

⁸ Renewal Order at 2.

pulling transmission wires. As a result of the TOY restrictions, the plan for the Skiffes Creek Project is extended by approximately five and one-half months, from December 30, 2018 to May 12, 2019.

The construction schedule will likely change again. PJM and Dominion Energy Virginia will provide an updated outage schedule and associated Yorktown Units 1 and 2 emission estimates in the event the outage schedule or emission estimates change further as directed by the Renewal Order.

REQUEST FOR CEII DESIGNATION

The filing consists of the following:

1. Non Public version of Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (password protected containing Critical Energy Infrastructure (“CEII”) material); and
2. Public version of Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (public version with CEII material redacted).

In regard to the Non Public version, PJM respectfully requests the information submitted to the DOE be designated as CEII pursuant Federal Power Act (“FPA”) Section 215A(d) and the implementing regulations, 18 C.F.R. Section 388.113.

In Fixing America's Surface Transportation Act (“FAST”) Section 215A(a)(3), CEII is specifically defined as information “designated as critical electric infrastructure information by ... the Secretary of the Department of Energy pursuant to subsection (d).”⁹ Under FPA Section 215A(a)(3), CEII includes information that is submitted to the DOE, and designated as such by DOE.¹⁰ The regulations define CEII in pertinent part as follows:

“1) Critical electric infrastructure information means information related to critical electric infrastructure ... Provided to the Commission or other Federal agency ... that is designated as critical electric infrastructure information by the Commission or the Secretary of the

⁹ FAST Act, Pub. L. No. 114-94, section 61,003, 129 Stat. 1312, 1776.

¹⁰ FAST Act, Pub. L. No. 114-94, section 61,003, 129 Stat. 1312, 1773 (“critical electric infrastructure information means information ... generated by or provided to the Commission or other Federal agency ... that is designated as critical electric infrastructure information by the Commission or the Secretary pursuant to subsection (d)”).

Department of Energy pursuant to section 215A(d) of the Federal Power Act. Such term includes information that qualifies as critical energy infrastructure information under the Commission's regulations. Critical Electric Infrastructure Information is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. 552(b)(3) and shall not be made available by any Federal, State, political subdivision or tribal authority pursuant to any Federal, State, political subdivision or tribal law requiring public disclosure of information or records pursuant to section 215A(d)(1)(A) and (B) of the Federal Power Act.”

2) *Critical energy infrastructure information* means specific engineering, vulnerability, or detailed design information about ... existing critical infrastructure that:

- (i) Relates details about the production, generation, transportation, transmission, or distribution of energy;
- (ii) Could be useful to a person in planning an attack on critical infrastructure;
- (iii) Is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. 552; and
- (iv) Does not simply give the general location of the critical infrastructure.”¹¹

PJM and Dominion Energy Virginia submits the redacted information is CEII because it provides details about the production, generation and transportation of energy, which if publically available could be useful in planning an attack on critical infrastructure in the North Hampton Road area of the Commonwealth of Virginia, namely the electric transmission system.

Respectfully submitted,

Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.
955 Jefferson Avenue
Valley Forge Corporate Center
Norristown, PA 19403-2497
Phone: 610-666-4370
Email: pincus@pjm.com

Craig Glazer
VP, Federal Government Policy
PJM Interconnection, L.L.C.

¹¹ 18 C.F.R. Section 388.113(c)(1) and (2).

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cc: Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Katherine Konieczny, U.S. Department of Energy
Sanjay Narayan, Sierra Club Environmental Law Program (Public Version of Outage Schedule)

From: Michael Regulinski
To: Batra, Rakesh
Subject: FW: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4
Date: Thursday, December 07, 2017 9:33:05 AM
Attachments: PUBLIC Skiffes Creek outages table 100917 tdb emissions updates 10102017.pdf
Encrypted Non-Public Confidential CEII.zip
DOE Report Updated Outages 10 12 17.pdf

Second try

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 Managing General Counsel
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 C: (b) (6)
michael.regulinski@dominionenergy.com

From: Michael Regulinski (Services - 6)
Sent: Thursday, October 12, 2017 4:39 PM
To: The.Secretary@hq.doe.gov; Hoffman, Patricia; Catherine.Jereza@HQ.DOE.GOV; Batra, Rakesh; Katherine.Konieczny@HQ.DOE.GOV
Cc: 'Pincus, Steven'; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Burlew, James M.; Mohammed Alfayyumi (VirginiaPower - 1T) (mohammed.alfayyumi@dominionenergy.com); Mike Barmer (VirginiaPower - 1T)
Subject: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4

Confidential Contains CEII Material

Dear Secretary Perry:

PJM Interconnection, LLC and Virginia Electric and Power Company, dba Dominion Energy Virginia, respectfully submit the following in compliance with Order No. 202-17-4:

1. Report on Yorktown Units 1 and 2 Revised Construction Schedule;
2. Public version of Skiffes Creek outages table (CEII material redacted); and
3. Non-Public version of Skiffes Creek outages table (password protected contains CEII material).

Please contact me if you have any questions.

Michael C. Regulinski
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CONFIDENTIALITY NOTICE: This electronic message contains information which may be legally confidential and or privileged and does not in any case represent a firm ENERGY COMMODITY bid or offer relating thereto which binds the sender without an additional express written confirmation to that effect. The information is intended solely for the individual or entity named above and access by anyone else is unauthorized. If you are not the

intended recipient, any disclosure, copying, distribution, or use of the contents of this information is prohibited and may be unlawful. If you have received this electronic transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.

From: Michael Regulinski
To: Batra, Rakesh
Subject: 1 of 3 emails
Date: Tuesday, December 05, 2017 11:30:31 AM
Attachments: PUBLIC Skiffes Creek outages table 100917 tdb emissions updates 10102017....pdf

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From: Michael Regulinski
To: Batra, Rakesh
Subject: 2 of 3 emails
Date: Thursday, December 07, 2017 9:33:01 AM
Attachments: Encrypted Non-Public Confidential CFIL.ZIP

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NON-PUBLIC CONFIDENTIAL – CEII

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (subject to change)

Outage	Outage Time Frame	Limiting Contingency	Load Threshold	Hours over Load Threshold**	Days over load threshold **	Dominion Emissions Estimates
(b) (3) (A)	7/9/17-9/29/17	(b) (3) (A)	>18,400 MW	87	18	NOx 243.06 SO2 933.11 PM10 52.62 CO2 122,385.60 Pb 0.0100 Hg 0.0015 HCl 22.01 HF 3.56 CO 11.88
(b) (3) (A) 34	1/2/18 – 2/9/18	(b) (3) (A)	>18,100 MW	5	2	NOx 27.01 SO2 103.68 PM10 5.85 CO2 13,598.40 Pb 0.0011 Hg 0.0002 HCl 2.45 HF 0.40 CO 1.32
(b) (3) (A)	9/29/17-10/27/17	(b) (3) (A)	>17,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	10/30/17-02/16/18	(b) (3) (A)	>17,200 MW	20	6	NOx 81.02 SO2 311.04 PM10 17.54 CO2 40,795.20 Pb 0.0033 Hg 0.0005 HCl 7.34 HF 1.19 CO 3.96
(b) (3) (A)	2/5/18 – 5/4/18	(b) (3) (A)	>18,000 MW	1	1	NOx 13.50 SO2 51.84 PM10 2.92 CO2 6,799.20 Pb 0.0006 Hg 0.0001

NON-PUBLIC CONFIDENTIAL – CEII

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (subject to change)

						HCl 1.22 HF 0.20 CO 0.66
(b) (3) (A)	10/27/17 – 10/30/17	(b) (3) (A)	1 unit > 12,000 MW 2 units > 14,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	2/19/18-3/31/18	(b) (3) (A)	1 unit > 14,400 MW, 2 units > 16,400 MW	4	0	NOx 13.50 SO2 51.84 PM10 2.92 CO2 6,799.20 Pb 0.0006 Hg 0.0001 HCl 1.22 HF 0.20 CO 0.66
(b) (3) (A)	4/2/18 – 4/28/18	(b) (3) (A) e	>13,000 MW	2	1	NOx 13.50 SO2 51.84 PM10 2.92 CO2 6,799.20 Pb 0.0006 Hg 0.0001 HCl 1.22 HF 0.20 CO 0.66
(b) (3) (A)	4/2/18 - 4/28/18	(b) (3) (A)	>18,000 MW	0	0	
(b) (3) (A)	4/30/18 – 6/9/18	(b) (3) (A)	1 unit > 12,000 MW, 2 units > 14,000 MW	160 59	16 10	NOx 216.05 SO2 829.43 PM10 46.77 CO2 108,787.20 Pb 0.0089 Hg 0.0014 HCl 19.56 HF 3.17 CO 10.56
(b) (3) (A)	5/21/18 -9/23/18	(b) (3) (A)	>18,000 MW	88	17	NOx 229.56 SO2 881.27 PM10 49.69 CO2 115,586.40 Pb 0.0094 Hg 0.0014

NON-PUBLIC CONFIDENTIAL – CEII

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (subject to change)

						HCl 20.79 HF 3.37 CO 11.22
(b) (3) (A)	9/16-18-11/2/18	(b) (3) (A)	1 unit > 12,000 MW 2 units > 14,000 MW	117 14	14 3	NOx 189.05 SO2 725.75 PM10 40.92 CO2 95,188.80 Pb 0.0078 Hg 0.0012 HCl 17.12 HF 2.77 CO 9.24
(b) (3) (A)	3/11/19-6/2/19	(b) (3) (A)	>17,200 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	3/11/19-3/17/19	(b) (3) (A)	>13,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	3/11/19-5/12/19	(b) (3) (A)	>18,100 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	3/18/19-3/24/19	(b) (3) (A)	1 unit > 14,400 MW, 2 units > 16,400MW	0	0 0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0

NON-PUBLIC CONFIDENTIAL – CEII

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (subject to change)

						CO 0.0
(b) (3) (A)	3/25/19-3/31/19	(b) (3) (A)	>18,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	4/1/19-4/7/19	(b) (3) (A)	>18,100 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	4/8/19-4/14/19	(b) (3) (A)	>18,100 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 - Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
			Total Estimate	557	89	NOx 1201.80 SO2 4613.72 PM10 260.16 CO2 605,128.80 Pb 0.0493 Hg 0.0075 HCl 108.82 HF 17.62 CO 58.75

*Outages scheduled to complete 5/12/2019.

** Estimates are for both Yorktown 1 & 2 units.

NON-PUBLIC CONFIDENTIAL – CEII

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (subject to change)

		07-2017	08-2017	09-2017	10-2017	11-2017	12-2017	01-2018	02-2018	03-2018	04-2018	05-2018	06-2018	07-2018	08-2018	09-2018	10-2018	11-2018	12-2018
Days over load threshold **		9	9	0	0	0	1	6	3	0	1	11	15	8	9	13	4	0	0
Hours over Load Threshold *		39	48	0	0	0	3	18	9	0	2	95	124	43	45	105	26	0	0
Dominion Emission Estimates (tons)	NOx	97.89	6.0	0.0	0.0	0.0	13.50	81.02	40.51	0.0	13.50	148.54	202.55	108.03	121.53	175.54	54.01	0.0	0.0
	SO2	391.87	20.8	0.0	0.0	0.0	51.84	311.04	155.51	0.0	51.84	570.23	777.59	414.72	466.56	673.91	207.36	0.0	0.0
	PM10	3.72	1.53	0.0	0.0	0.0	2.92	17.54	8.77	0.0	2.92	32.15	43.85	23.39	26.31	38.00	11.69	0.0	0.0
	CO2	89,173.9	2741.4	-	-	-	6,799.2	40,795.2	20,397.6	-	6,799.2	74,791.2	101,988	54,393.6	61,192.8	88,389.6	27,196.8	-	-
	Pb	0.0040	0.00561	0.0	0.0	0.0	0.0006	0.0033	0.0017	0.0	0.0006	0.0061	0.0083	0.0044	0.0050	0.0072	0.0022	0.0	0.0
	Hg	0.0008	0.00004	0.0	0.0	0.0	0.0001	0.0005	0.0003	0.0	0.0001	0.0009	0.0013	0.0007	0.0008	0.0011	0.0003	0.0	0.0
	HCl	11.48	0.6387	0.0	0.0	0.0	1.22	7.34	3.67	0.0	1.22	13.45	18.34	9.78	11.00	15.89	4.89	0.0	0.0
	HF	1.43	0.07984	0.0	0.0	0.0	0.20	1.19	0.59	0.0	0.20	2.18	2.97	1.58	1.78	2.57	0.79	0.0	0.0
	CO	4.78	0.26614	0.0	0.0	0.0	0.66	3.96	1.98	0.0	0.66	7.26	9.90	5.28	5.94	8.58	2.64	0.0	0.0

		01-2019	02-2019	03-2019	04-2019	05-2019
Days over load threshold **		0	0	0	0	0
Hours over Load Threshold **		0	0	0	0	0
Dominion Emission Estimates (tons)	NOx	0.0	0.0	0.0	0.0	0.0
	SO2	0.0	0.0	0.0	0.0	0.0
	PM10	0.0	0.0	0.0	0.0	0.0
	CO2	-	-	-	-	-
	Pb	0.0	0.0	0.0	0.0	0.0

NON-PUBLIC CONFIDENTIAL – CEII

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of October 9, 2017 (subject to change)

	Hg	0.0	0.0	0.0	0.0	0.0
	HCl	0.0	0.0	0.0	0.0	0.0
	HF	0.0	0.0	0.0	0.0	0.0
	CO	0.0	0.0	0.0	0.0	0.0

Figures highlighted in green are actual emission data for the month

From: Michael Regulinski
To: Batra, Rakesh
Subject: 3 of 3 emails
Date: Tuesday, December 05, 2017 11:31:13 AM
Attachments: DOE Report Updated Outages 10.12.17.pdf

Michael C. Regulinski
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teline: 738-2794
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From: Pincus, Steven
To: [Batra, Rakesh](mailto:Rakesh.Batra@Hq.Doe.Gov)
Subject: RE: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4
Date: Tuesday, December 05, 2017 11:29:33 AM

I sent it. You might be having a problem due to its size. I will resend again.

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]
Sent: Tuesday, December 05, 2017 11:29 AM
To: Michael Regulinski; Pincus, Steven
Subject: RE: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4

External Email! Think before clicking links or attachments.

Strange. I haven't received it yet.

Rakesh

From: Michael Regulinski [<mailto:michael.regulinski@dominionenergy.com>]
Sent: Tuesday, December 05, 2017 11:22 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Pincus, Steven <Steven.Pincus@pjm.com>
Subject: RE: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4
 Yes, at 10:30. I'll send again
 Michael C. Regulinski
 Managing General Counsel
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 tieline: 738-2794
 P: (804) 819-2794
 C: (b) (6)
michael.regulinski@dominionenergy.com

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]
Sent: Tuesday, December 05, 2017 11:20 AM
To: Michael Regulinski (Services - 6); Pincus, Steven
Subject: [External] RE: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4
 Did you send it? I still haven't received it.
 Please confirm.
 Thanks,
 Rakesh

From: Michael Regulinski [<mailto:michael.regulinski@dominionenergy.com>]
Sent: Thursday, October 12, 2017 4:42 PM
To: Secretary Perry <The.Secretary@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Cc: Pincus, Steven <Steven.Pincus@pjm.com>; Bryson, Mike E. <Michael.Bryson@pjm.com>; Souder, David W. <David.Souder@pjm.com>; Tam, Simon K. <Simon.Tam@pjm.com>; Glazer, Craig <Craig.Glazer@pjm.com>; O'Hara, Chris <Chris.OHara@pjm.com>; Burlew, James M. <James.Burlew@pjm.com>; Mohammed Alfayyumi

<mohammed.alfayyumi@dominionenergy.com>; Mike Barmer

<mike.barmer@dominionenergy.com>

Subject: RE: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4

The password for opening the Non-Public version of Skiffes Creek outages table is (b) (6)

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michael.regulinski@dominionenergy.com

From: Michael Regulinski (Services - 6)

Sent: Thursday, October 12, 2017 4:39 PM

To: The.Secretary@hq.doe.gov; Hoffman, Patricia; Catherine.Jereza@HQ.DOE.GOV; Batra, Rakesh; Katherine.Konieczny@HQ.DOE.GOV

Cc: 'Pincus, Steven'; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Burlew, James M.; Mohammed Alfayyumi (VirginiaPower - 1T) (mohammed.alfayyumi@dominionenergy.com); Mike Barmer (VirginiaPower - 1T)

Subject: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4

Confidential Contains CEII Material

Dear Secretary Perry:

PJM Interconnection, LLC and Virginia Electric and Power Company, dba Dominion Energy Virginia, respectfully submit the following in compliance with Order No. 202-17-4:

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3. Non-Public version of Skiffes Creek outages table (password protected contains CEII material).

Please contact me if you have any questions.

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C: (b) (6)
michael.regulinski@dominionenergy.com

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unlawful. If you have received this electronic transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.

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From: Michael Regulinski
To: Batra, Rakesh; Pincus, Steven
Subject: RE: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4
Date: Tuesday, December 05, 2017 11:29:57 AM

I'll send separately

Michael C. Regulinski
 Managing General Counsel
 Dominion Energy Services, Inc.
 tieline: 738-2794
 P: (804) 819-2794
 C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]
Sent: Tuesday, December 05, 2017 11:29 AM
To: Michael Regulinski (Services - 6); Pincus, Steven
Subject: [External] RE: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4
 Strange. I haven't received it yet.
 Rakesh

From: Michael Regulinski [<mailto:michael.regulinski@dominionenergy.com>]
Sent: Tuesday, December 05, 2017 11:22 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Pincus, Steven <Steven.Pincus@pjm.com>
Subject: RE: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4
 Yes, at 10:30. I'll send again
 Michael C. Regulinski
 Managing General Counsel
 Dominion Energy Services, Inc.
 tieline: 738-2794
 P: (804) 819-2794
 C: (b) (6)
michael.regulinski@dominionenergy.com

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]
Sent: Tuesday, December 05, 2017 11:20 AM
To: Michael Regulinski (Services - 6); Pincus, Steven
Subject: [External] RE: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No. 202-17-4
 Did you send it? I still haven't received it.
 Please confirm.
 Thanks,
 Rakesh

From: Michael Regulinski [<mailto:michael.regulinski@dominionenergy.com>]
Sent: Thursday, October 12, 2017 4:42 PM
To: Secretary Perry <The.Secretary@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>;

Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine
<Katherine.Konieczny@Hq.Doe.Gov>

Cc: Pincus, Steven <Steven.Pincus@pjm.com>; Bryson, Mike E.
<Michael.Bryson@pjm.com>; Souder, David W. <David.Souder@pjm.com>; Tam,
Simon K. <Simon.Tam@pjm.com>; Glazer, Craig <Craig.Glazer@pjm.com>; O'Hara,
Chris <Chris.OHara@pjm.com>; Burlew, James M. <James.Burlew@pjm.com>;
Mohammed Alfayyumi <mohammed.alfayyumi@dominionenergy.com>; Mike
Barmer <mike.barmer@dominionenergy.com>

Subject: RE: Report on Yorktown Units 1 and 2 Revised Construction Schedule -
Order No. 202-17-4

The password for opening the Non-Public version of Skiffes Creek outages table is
(b) (6)

Michael C. Regulinski
Managing General Counsel
Dominion Energy Services, Inc.
tieline: 738-2794
P: (804) 819-2794
C: (b) (6)
michael.regulinski@dominionenergy.com

From: Michael Regulinski (Services - 6)
Sent: Thursday, October 12, 2017 4:39 PM
To: The.Secretary@hq.doe.gov; Hoffman, Patricia; Catherine.Jereza@HQ.DOE.GOV;
Batra, Rakesh; Katherine.Konieczny@HQ.DOE.GOV
Cc: 'Pincus, Steven'; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig;
O'Hara, Chris; Burlew, James M.; Mohammed Alfayyumi (VirginiaPower - 1T)
(mohammed.alfayyumi@dominionenergy.com); Mike Barmer (VirginiaPower - 1T)
Subject: Report on Yorktown Units 1 and 2 Revised Construction Schedule - Order No.
202-17-4

Confidential Contains CEII Material

Dear Secretary Perry:
PJM Interconnection, LLC and Virginia Electric and Power Company, dba
Dominion Energy Virginia, respectfully submit the following in compliance
with Order No. 202-17-4:

1. Report on Yorktown Units 1 and 2 Revised Construction Schedule;
2. Public version of Skiffes Creek outages table (CEII material redacted);
and
3. Non-Public version of Skiffes Creek outages table (password protected
contains CEII material).

Please contact me if you have any questions.

Michael C. Regulinski
Managing General Counsel
Dominion Energy Services, Inc.
tieline: 738-2794
P: (804) 819-2794
C: (b) (6)
michael.regulinski@dominionenergy.com

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From: Mills, Brian
To: Konieczny, Katherine
Cc: Batra, Rakesh; Rosenbaum, Matthew
Subject: PJM 202(c) renewal
Date: Tuesday, December 05, 2017 3:15:24 PM

Do we have a draft renewal order ?

From: Mills, Brian
To: Jereza, Catherine
Cc: Batra, Rakesh; Rosenbaum, Matthew; Smith, Julie A (OE)
Subject: PJM 202(c) Draft CX
Date: Tuesday, December 05, 2017 3:33:31 PM
Attachments: CX 2017 202 PJM 12 05 17 Draft.doc

Attached is Draft CX for the subject renewal.
As you can see, I need the Order # before I can finalize
Brian

From: Michael Regulinski
To: Batra, Rakesh
Subject: Phone Call
Date: Tuesday, December 05, 2017 3:52:16 PM
Attachments: NON PUBLIC CONFIDENTIAL CEII Skiffes Creek outages table 100917 tdb emissions updates 10102017.pdf

Michael C. Regulinski
Managing General Counsel
Dominion Energy Services, Inc.
teline: 738-2794
P: (804) 819-2794
C: (b) (6)
michael.regulinski@dominionenergy.com

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From: Jereza, Catherine
To: Mills, Brian
Cc: Batra, Rakesh; Rosenbaum, Matthew; Smith, Julie A (OE)
Subject: RE: PJM 202(c) Draft CX
Date: Tuesday, December 05, 2017 4:08:02 PM

(b) (5)

-----Original Message-----

From: Mills, Brian
Sent: Tuesday, December 05, 2017 3:33 PM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Cc: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Roseubanni, Matthew <Matthew.Rosenbaum@hq.doe.gov>;
Smith, Julie A (OE) <JulieA.Smith@hq.doe.gov>
Subject: PJM 202(c) Draft CX

Attached is Draft CX for the subject renewal.
As you can see, I need the Order # before I can finalize
Brian

From: Bittner, Kathy (CONTR)
To: Batra, Rakesh
Cc: Jereza, Catherine
Subject: RE: 2017-008959 - Yorktown Run Test Run Report (Order 202-17-4)
Date: Wednesday, December 06, 2017 10:15:02 AM
Attachments: 2017-008959 - Incoming.pdf

Hi Rakesh and Katie,

I believe that you both have received this, but wanted to send it just in case.

(b) (5)

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

Dominion Energy Services, Inc.
Law Department
120 Treadegar Street, Richmond, VA 23219
DominionEnergy.com



Michael Regulinski
Managing General Counsel
Direct: (804) 819-2794; Facsimile: (804) 819 2183
Email: michael.regulinski@dominionenergy.com

December 1, 2017

The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4

Dear Secretary Perry:

As requested by DOE staff and pursuant to Order No. 202-17-4 (the "Order") issued on September 14, 2017 by the Secretary of Energy ("Secretary"), PJM Interconnection, LLC ("PJM") and Virginia Electric and Power Company ("Dominion Energy Virginia") respectfully submits the attached spreadsheet (Attachment 1) that reflects historical operations and emissions data for Yorktown Units 1 and 2 for the years 2015-2017. As requested by the DOE staff, the spreadsheet provides the same categories of information and in the same format used in Attachment 3 of the September 28, 2017 Report on Yorktown Units 1 and 2 operations. The spreadsheet is provided in accordance with the Secretary's directive to report all dates on which Yorktown Units 1 and 2 are operated as well as the estimated emissions associated with their operations.¹

Attachment 1 shows the actual runtime and air emissions data for the period, and includes hourly runtime data for the equipment for the Yorktown units, and raw and calculated data showing emissions data associated with operations of the equipment. The information reports hourly emissions of PM-10 and SO₂ in pounds per hour and pounds per million BTU, and mercury in pounds per hour and pounds per trillion BTU (Mercury and Air Toxics Standards (MATS) format) for the operating period beginning

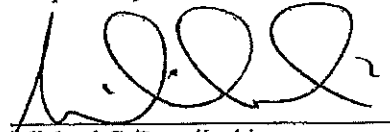
¹ Order at page 2.

January 1, 2015, through November 26, 2017. Additionally, Attachment 1 provides hourly emissions of NOx in pounds per hour, greenhouse gases (as CO₂) in tons per hour, lead in pounds per hour, HCl in pounds per hour, HF in pounds per hour, and CO in pounds per hour. NOx and SO₂ emissions are based on valid hours of Continuous Emissions Monitoring System (CEMS) data for the period. For the period beginning July 21, 2017, through November 26, 2017, PM-10 emissions are based on the emission factor derived from the July 21, 2017, stack test (0.0168 lbs/mmBtu corrected to 0.1143 lbs/mmBtu calculated for PM-10 filterable plus condensable). For the period beginning June 3, 2015, through July 20, 2017, PM-10 emissions are based on the emission factor derived from the June 3, 2015, stack test (0.015 lbs/mmBtu corrected to 0.087 lbs/mmBtu calculated for PM-10 filterable plus condensable). For the period beginning January 1, 2015, through June 2, 2015, PM-10 emissions are based on the emission factor derived from the July 29, 2014, stack test (0.035 lbs/mmBtu corrected to 0.1255 lbs/mmBtu calculated for PM-10 filterable plus condensable). CO₂ emissions are based on valid CEMS hours for the operating period. All other emissions were calculated using emission factors from AP-42, Fifth Edition, Volume 1, Chapter 1: External Combustion Sources and calculated hourly coal consumption in tons.²

PJM and Dominion Energy Virginia respectfully submits the information in this report be accepted by the Secretary as compliant with the Order's directives to report all dates on which Yorktown Units 1 and 2 are operated well as the estimated and actual emissions associated with their operations.

² Mercury and lead emissions were calculated using AP-42, Table 1.1-18. CO emissions were calculated using emission factors from AP-42, Table 1.1-3. Total HAP metals and individual HAP metals are not provided because MATS Table 2 (40 CFR 63, Subpart UUUUU) provides for compliance with either the PM limit or total non-mercury HAP metals limits or individual HAP metals. Dominion Energy Virginia is providing PM-10 emissions for the purposes of MATS. HCl and HF emissions were calculated using emission factors from AP-42, Table 1.1-15.

Respectfully submitted,



Michael C. Regulinski
Managing General Counsel
Dominion Energy Services, Inc.
120 Tredegar Street, RS-2
Richmond, Virginia 23219
Phone: (804) 819-2794
Email: michael.regulinski@dominionenergy.com

Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.
955 Jefferson Avenue
Valley Forge Corporate Center
Norristown, PA 19403-2497
Phone: 610-666-4370
Email: pincus@pjm.com

cc: Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Casey Roberts, Sierra Club Environmental Law Program

Stanton, Kimberly (CONTR)

From: Michael Regulinski <michael.regulinski@dominionenergy.com>
Sent: Friday, December 01, 2017 3:10 PM
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; casey.roberts@sierraclub.org; Robinson, Evelyn; Pincus, Steven
Subject: Order No. 202-17-4 Report on Yorktown Operations
Attachments: Attachment 1 Yorktown Hourly Emissions Data VALUES 2015 thru 2017.xlsx; 2017-12-01 Dominion Energy letter to Secretary Perry.pdf

Please see attached Yorktown Report requested by DOE staff submitted by PJM Interconnection and Dominion Energy Virginia. Please let me know if you have any questions. Thanks, Mike

Michael C. Regulinski
Managing General Counsel

Dominion Energy Services, Inc.
teline: 738-2794
P: (804) 819-2794
C: (b) (6)
michael.regulinski@dominionenergy.com

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From: Konieczny, Katherine
To: Batra, Rakesh; Drake, Christopher
Cc: Mills, Brian; Jereza, Catherine; Rosenbaum, Matthew
Subject: RE: PJM/Dominion 202 (C) Renewal Order
Date: Thursday, December 07, 2017 8:54:50 AM

(b) (5)

Thank you,
Kathy

-----Original Message-----

From: Batra, Rakesh
Sent: Thursday, December 07, 2017 8:43 AM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: PJM/Dominion 202 (C) Renewal Order

Kathe/Chris:

Please update us the status of PJM/Dominion 202 (C) Renewal Order. (b) (6), (b) (5)

Thanks,
Rakesh Batra
202-586-1283

From: Konieczny, Katherine
To: Batra, Rakesh; Drake, Christopher
Cc: Mills, Brian; Jereza, Catherine; Rosenbaum, Matthew
Subject: RE: PJM/Dominion 202 (C) Renewal Order
Date: Thursday, December 07, 2017 9:33:50 AM

Thanks! (b) (5)

-----Original Message-----

From: Batra, Rakesh
Sent: Thursday, December 07, 2017 9:28 AM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

Please find attached Action Memo for your review.

Thanks,
Rakesh

-----Original Message-----

From: Konieczny, Katherine
Sent: Thursday, December 07, 2017 8:55 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

(b) (5)

Thank you,
Kathy

-----Original Message-----

From: Batra, Rakesh
Sent: Thursday, December 07, 2017 8:43 AM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: PJM/Dominion 202 (C) Renewal Order

Kathe/Chris:

Please update us the status of PJM/Dominion 202 (C) Renewal Order (b) (5), (b) (6)

(b) (5), (b) (6)

Thanks,
Rakesh Batra
202-586-1283

From: Mills, Brian
To: Konieczny, Katherine; Batra, Rakesh; Drake, Christopher
Cc: Jereza, Catherine; Rosenbaum, Matthew; Smith, Julie A (OE)
Subject: RE: PJM/Dominion 202 (C) Renewal Order
Date: Thursday, December 07, 2017 9:53:34 AM
Attachments: CX 2017 202 PJM 12 07 17.doc

Kathy:
Draft CX attached. (b) (5)

Brian

-----Original Message-----

From: Konieczny, Katherine
Sent: Thursday, December 07, 2017 8:55 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

(b) (5)

Thank you,
Kathy

-----Original Message-----

From: Batra, Rakesh
Sent: Thursday, December 07, 2017 8:43 AM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: PJM/Dominion 202 (C) Renewal Order

Kathe/Chris:

Please update us the status of PJM/Dominion 202 (C) Renewal Order. (b) (5), (b) (6)

Thanks,
Rakesh Batra
202-586-1283

From: Konieczny, Katherine
To: Mills, Brian; Batra, Rakesh; Drake, Christopher
Cc: Jereza, Catherine; Rosenbaum, Matthew; Smith, Julie A (OE)
Subject: RE: PJM/Dominion 202 (C) Renewal Order
Date: Thursday, December 07, 2017 9:56:24 AM

(b) (5)

-----Original Message-----

From: Mills, Brian
Sent: Thursday, December 07, 2017 9:54 AM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Smith, Julie A (OE) <JulieA.Smith@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

Kathy:
Draft CX attached. (b) (5)

Brian

-----Original Message-----

From: Konieczny, Katherine
Sent: Thursday, December 07, 2017 8:55 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

(b) (5)

Thank you,
Kathy

-----Original Message-----

From: Batra, Rakesh
Sent: Thursday, December 07, 2017 8:43 AM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: PJM/Dominion 202 (C) Renewal Order

Kathe/Chris:

Please update us the status of PJM/Dominion 202 (C) Renewal Order. (b) (5), (b) (6)

(b) (5), (b) (6)

Thanks,
Rakesh Batra
202-586-1283

From: Bittner, Kathy (CONTR)
To: Jereza, Catherine; Batra, Rakesh
Subject: RE: 2017-008921 - PJM renewal request
Date: Thursday, December 07, 2017 12:23:29 PM
Attachments: 2017-008921- Action Memo to S1 12.8.17.docx

Hi Katie and Rakesh,

Attached please find the Action Memo from the last package. (b) (5)

Thanks,
Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Jereza, Catherine
Sent: Friday, December 01, 2017 2:14 PM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: RE: 2017-008921 - PJM renewal request

Hi Kathy - The order must be issued on or before December 13, which is a Wed. (b) (5)

Thanks
Katie

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Friday, December 01, 2017 2:04 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: 2017-008921 - PJM renewal request

Good afternoon Rakesh,

I wasn't sure if you and Katie have received this correspondence already, but wanted to make sure. (b) (5)

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

From: Jereza, Catherine
To: Batra, Rakesh
Subject: FW: 2017-008921 - PJM renewal request
Date: Thursday, December 07, 2017 12:27:24 PM
Attachments: 2017-008921- Action Memo to S1 12.8.17.docx

I believe it should go through Mark W. Menezes Under Secretary of Energy

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Thursday, December 07, 2017 12:23 PM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: RE: 2017-008921 - PJM renewal request

Hi Katie and Rakesh,

Attached please find the Action Memo from the last package. (b) (5)

Thanks,
Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Jereza, Catherine
Sent: Friday, December 01, 2017 2:14 PM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: RE: 2017-008921 - PJM renewal request

Hi Kathy - The order must be issued on or before December 13, which is a Wed. (b) (5)

Thanks
Katie

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Friday, December 01, 2017 2:04 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: 2017-008921 - PJM renewal request

Good afternoon Rakesh,

I wasn't sure if you and Katie have received this correspondence already, but wanted to make sure. (b) (5)

(b) (5)

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

From: Konieczny, Katherine
To: Batra, Rakesh; Drake, Christopher
Cc: Mills, Brian; Jereza, Catherine; Rosenbaum, Matthew; King-Gilmore, Christy; Mumme, Bettina
Subject: RE: PJM/Dominion 202 (C) Renewal Order
Date: Thursday, December 07, 2017 1:01:05 PM
Attachments: 2017-008921- Action Memo to S1 12.8.17 GC76.docx
CX 2017 202 PJM 12 07 17.doc
DRAFT Order 202-18-2 as of 12-7 12pm.docx
DRAFT Order 202-18-2 Summary of Findings 12-7 12pm.docx
Importance: High

The draft renewal package is attached, (b) (5)

As always, please closely review the draft order and summary of findings for any inaccuracies, as we don't pretend to be the engineers here!

(b) (6)

Thank you,
Kathy

-----Original Message-----

From: Batra, Rakesh
Sent: Thursday, December 07, 2017 9:36 AM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

Yes Please.

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From: Konieczny, Katherine
Sent: Thursday, December 07, 2017 9:34 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
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Thanks! (b) (5)

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Subject: PJM/Dominion 202 (C) Renewal Order

Kathe/Chris:

Please update us the status of PJM/Dominion 202 (C) Renewal Order. (b) (5), (b) (6)

Thanks,
Rakesh Batra
202-586-1283

From: Mills, Brian
To: Konieczny, Katherine; Batra, Rakesh; Drake, Christopher
Cc: Jereza, Catherine; Rosenbaum, Matthew; King-Gilmore, Christy; Mumme, Bettina
Subject: RE: PJM/Dominion 202 (C) Renewal Order
Date: Thursday, December 07, 2017 3:15:00 PM
Attachments: CX 202_18_2.pdf

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Page 2 Of 3 Findings discussion:

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Subject: PJM/Dominion 202 (C) Renewal Order

Kathe/Chris:

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Thanks,

Rakesh Batra

202-586-1283



Department of Energy
Washington, DC 20585

December 07, 2017

RECORDS OF CATEGORICAL EXCLUSION DETERMINATION

Order No. 202-18-2

The National Environmental Policy Act (NEPA) requires federal agencies to prepare Environmental Impact Statements (EISs) for major federal actions significantly affecting the quality of the human environment.

The Department of Energy's (DOE's) regulations that implement NEPA (10 C.F.R. Part 1021) require it to determine whether a proposal requires that an EIS, an Environmental Assessment (EA), or a Categorical Exclusion (CX) be prepared. A CX refers to a category of actions that DOE has determined do not individually or cumulatively have a significant effect on the human environment. As such, DOE need not prepare an EA or an EIS for CX actions.

On June 13, 2017, PJM Interconnection, L.L.C. (PJM), the Regional Transmission Organization (RTO) whose service territory includes the North Hampton Roads area east of Richmond, Virginia, filed a *Request for Emergency Order Pursuant to Section 202(c) of the Federal Power Act* (FPA) with the United States DOE "to preserve the reliability of [the] bulk power electric transmission system in the North Hampton Roads area." The emergency order would require Virginia Electric and Power Company (Dominion Energy Virginia), the public utility serving the area, to operate its two coal-fired units at its Yorktown Power Station (Yorktown Unit 1 and Yorktown Unit 2) to react to electricity reliability emergencies.

On June 16, 2017, the Secretary of Energy, on behalf of the DOE, issued Order No. 202-17-2, determining that an electricity reliability emergency exists in the Commonwealth of Virginia, ordering Dominion Energy Virginia to operate Units 1 and 2 of the Yorktown Power Station from June 16, 2017 to September 14, 2017 only when called upon for electricity reliability emergency issues.

On August 24, 2017, PJM filed a *Request for reissuance of DOE Order No. 202-17-2*, with DOE "to preserve the reliability of the bulk power transmission system in the North Hampton Roads area." Reissuance of *DOE Order No. 202-17-2* would require Dominion Energy Virginia, to operate Yorktown Unit 1 and Yorktown Unit 2 to react to reliability emergencies from September 15, 2017 to December 13, 2017.

On September 14, 2017, the Secretary of Energy, on behalf of the DOE, issued Order No. 202-17-4, determining that an electricity reliability emergency exists in the Commonwealth of Virginia, ordering Dominion Energy Virginia to operate Units 1 and 2 of the Yorktown Power Station from September 15, 2017 to December 13, 2017 only when called upon for electricity reliability emergency issues.

On November 29, 2017, PJM filed a *Request for reissuance of DOE Order No. 202-17-4*, with DOE “to preserve the reliability of the bulk power transmission system in the North Hampton Roads area.” Reissuance of *DOE Order No. 202 17 4* would require Dominion Energy Virginia, to operate Yorktown Unit 1 and Yorktown Unit 2 to react to reliability emergencies from December 14, 2017 to March 13, 2018.

PROPOSED ACTION: The DOE proposed Federal action would be the reissuance of DOE Order No. 202-17-4, as DOE Order No. 202-18-2, an emergency order targeted to prevent uncontrolled power disruptions and shedding of critical load in the North Hampton Roads area on the Virginia Peninsula for 90 days.

FPA section 202(c) (2) requires the Secretary of Energy to ensure that any 202(c) order that may result in a conflict with a requirement of any environmental law be limited to the “hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable,” be consistent with any applicable environmental law and minimize any adverse environmental impacts.

BACKGROUND: In November 2011, and again in October 2012, Dominion Energy Virginia notified PJM of its plan to deactivate both units, effective December 31, 2014, because the units were not equipped to comply with the Environmental Protection Agency’s (EPA) Mercury and Air Toxics Standards (MATS), 40 C.F.R. part 63 subpart UUUUU.

By letters dated December 14, 2011 and April 11, 2014, PJM notified Dominion Energy Virginia that the deactivation of Yorktown Units 1 and 2 respectively would adversely affect the PJM transmission system absent the installation of certain transmission upgrades necessary to address the reliability impacts. PJM included the required transmission upgrade known as the Skiffes Creek Transmission Project a new 500kV transmission line across the James River as an upgrade.

PJM load flow studies indicate that generation from Yorktown Units 1 and 2 will be needed to prevent the possibility of uncontrolled power disruptions in the North Hampton Roads area or other loss of grid reliability such as the implementation of an automated controlled load shed scheme.

Dominion Energy Virginia developed, an automated controlled load shed scheme known as the Remedial Action Scheme (“RAS”) or as the “North Hampton RAS” to address deactivation of the Yorktown Units. The North Hampton RAS” would result in a forced interruption of service to load on the Peninsula. During certain high load conditions, this power interruption could result in power loss effecting over 150,000 customers in the North Hampton Roads^a area of Virginia. In addition to residential customers, hospitals, nursing homes, schools, commercial,

^a The North Hampton Roads load area includes the following: Charles City County, James City County, York County, Williamsburg, Yorktown, Newport News, Poquoson, Hampton, Essex County, King William County, King and Queen County, Middlesex County, Mathews County, Gloucester County, the City of West Point, King George County, Westmoreland County, Northumberland County, Richmond County, Lancaster County, and the City of Colonial Beach.

industrial, and national defense facilities would be without power during those peak load conditions on the Peninsula.

CX TO BE APPLIED: The proposed action identified above fits within the classes listed in Appendix B to Subpart D, of 10 CFR Part 1021-Categorical exclusions applicable to specific agency actions. Specifically:

B4.4 Power marketing services and activities.


Power marketing services and power management activities (including, but not limited to, storage, load shaping and balancing, seasonal exchanges, and other similar activities), provided that the operations of generating projects would remain within normal operating limits.

REGULATORY REQUIREMENT: The DOE proposed action is the reissuance of DOE Order No. 202-17-4, as DOE Order No. 202-18-2. The DOE Order reissuance will continue the operational limitations described for electricity reliability emergency issues.

The expected combined operation of Yorktown Units 1 and 2 reacting to electricity reliability emergencies under DOE Order No. 202-18-2 will be well below normal operating capacities and limits of Yorktown Units 1 and 2.

DOE has determined that the proposed action identified above will not have a significant effect on the human environment. Authorizing the proposed action will not (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health including DOE and/or Executive orders; (2) require siting of new facilities or expansion of existing facilities; (3) disturb hazardous substances, pollutants or contaminants; or (4) adversely affect environmentally sensitive resources.

DETERMINATION: Based on my review of the above information concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class of actions, other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

Signature: 
Brian Mills
NEPA Compliance Officer
Office of Electricity Delivery
and Energy Reliability

Date: December 07, 2017

From: Konieczny, Katherine
To: Batra, Rakesh; Mills, Brian; Drake, Christopher
Cc: Jereza, Catherine; Rosenbaum, Matthew
Subject: RE: PJM/Dominion 202 (C) Renewal Order
Date: Thursday, December 07, 2017 11:34:54 PM
Attachments: 2017-008921- Action Memo to S1 12.8.17 GC76.docx
DRAFT Order 202-18-2 as of 12-7 11pm.docx
DRAFT Order 202-18-2 Summary of Findings 12-7 11pm.docx
OE Concurrence Sheet 120717 3PM.docx

The 202(c) renewal package is attached. (b) (5)

Please let us know if you have any questions. I'll update you when I hear from EPA.

Thank you,
 Kathy

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From: Batra, Rakesh
Sent: Thursday, December 07, 2017 3:35 PM
To: Mills, Brian <Brian.Mills@hq.doe.gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
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Subject: RE: PJM/Dominion 202 (C) Renewal Order

OE's input. Brian sent the CX document separately.

Thank you,
 Rakesh

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Page 2 Of 3 Findings discussion:

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Mumme, Bettina <Bettina.Mumme@hq.doe.gov>

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Importance: High

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Thanks,
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To: Konieczny, Katherine; Batra, Rakesh; Drake, Christopher
Cc: Jereza, Catherine; Rosenbaum, Matthew
Subject: RE: PJM/Dominion 202 (C) Renewal Order
Date: Friday, December 08, 2017 8:32:51 AM

(b) (5)

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Rakesh Batra
202-586-1283

From: Bittner, Kathy (CONTR)
To: Batra, Rakesh; Mills, Brian
Cc: Jereza, Catherine
Subject: RE: PJM/Dominion 202 (C) Renewal Order
Date: Friday, December 08, 2017 9:39:02 AM

Okay, let me know when I can send I out.

From: Batra, Rakesh
Sent: Friday, December 08, 2017 9:34 AM
To: Bittner, Kathy (CONTR) ; Mills, Brian
Cc: Jereza, Catherine
Subject: RE: PJM/Dominion 202 (C) Renewal Order
Please remember that according to Kathy K, (b) (5)

Rakesh

From: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>
Date: Friday, Dec 08, 2017, 9:28 AM
To: Mills, Brian <Brian.Mills@hq.doe.gov>
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>, Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order
Thanks Brian. I will wait for the Summary of Findings (b) (5)

-----Original Message-----

From: Mills, Brian
Sent: Friday, December 08, 2017 9:22 AM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: FW: PJM/Dominion 202 (C) Renewal Order

Kathy: (b) (5)

Brian

-----Original Message-----

From: Konieczny, Katherine
Sent: Thursday, December 07, 2017 11:35 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

The 202(c) renewal package is attached. (b) (5)

(b) (5)

Please let us know if you have any questions. I'll update you when I hear from EPA.

Thank you,
Kathy

-----Original Message-----

From: Batra, Rakesh
Sent: Thursday, December 07, 2017 3:35 PM
To: Mills, Brian <Brian.Mills@hq.doe.gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; King-Gilmore, Christy <Christy.King-Gilmore@hq.doe.gov>; Mumme, Bettina <Bettina.Mumme@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

OE's input. Brian sent the CX document separately.

Thank you,
Rakesh

-----Original Message-----

From: Mills, Brian
Sent: Thursday, December 07, 2017 3:15 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; King-Gilmore, Christy <Christy.King-Gilmore@hq.doe.gov>; Mumme, Bettina <Bettina.Mumme@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

A review of the spreadsheet indicates that the units have been fired up parts of 20 days since June 14. (some days for less than 1 hour).

Page 2 Of 3 Findings discussion:

" To date, in accordance with Order Nos. 202-17-2 and 202-17-4, PJM reported operation of Yorktown Units 1 and/or 2 for all or part of 20 days"

-----Original Message-----

From: Konieczny, Katherine
Sent: Thursday, December 07, 2017 1:01 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; King-Gilmore, Christy <Christy.King-Gilmore@hq.doe.gov>; Mumme, Bettina <Bettina.Mumme@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order
Importance: High

The draft renewal package is attached, (b) (5)

As always, please closely review the draft order and summary of findings for any inaccuracies, as we don't pretend to be the engineers here!

(b) (6)

Thank you,
Kathy

-----Original Message-----

From: Batra, Rakesh
Sent: Thursday, December 07, 2017 9:36 AM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

Yes Please.

-----Original Message-----

From: Konieczny, Katherine
Sent: Thursday, December 07, 2017 9:34 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

Thanks! (b) (5)

-----Original Message-----

From: Batra, Rakesh
Sent: Thursday, December 07, 2017 9:28 AM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

Please find attached Action Memo for your review.

Thanks,
Rakesh

-----Original Message-----

From: Konieczny, Katherine
Sent: Thursday, December 07, 2017 8:55 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: PJM/Dominion 202 (C) Renewal Order

Both the draft order and summary of findings are written, (b) (5)

Thank you,

Kathy

-----Original Message-----

From: Batra, Rakesh

Sent: Thursday, December 07, 2017 8:43 AM

To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>

Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: PJM/Dominion 202 (C) Renewal Order

Kathe/Chris:

Please update us the status of PJM/Dominion 202 (C) Renewal Order. (b) (5), (b) (6)

Thanks,
Rakesh Batra
202-586-1283

From: Jereza, Catherine
To: Batra, Rakesh; Brian Mills; Rosenbaum, Matthew
Subject: RE: OE 202c related by Wed 12/13
Date: Tuesday, December 12, 2017 10:09:59 AM

Ok - thanks!

From: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Date: Tuesday, Dec 12, 2017, 7:06 AM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>, Brian Mills <sherry-brian@comcast.net>, Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: OE 202c related by Wed 12/13

No, we don't. (b) (5), (b) (6)

I will follow up around 11.

Thanks,
 Rakesh

From: Jereza, Catherine
Sent: Monday, December 11, 2017 7:08 PM
To: Batra, Rakesh ; Brian Mills ; Rosenbaum, Matthew
Subject: FW: OE 202c related by Wed 12/13
 Do we?

From: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Date: Monday, Dec 11, 2017, 1:40 PM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>, Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>
Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>
Subject: RE: OE 202c related by Wed 12/13
 The EPA email just came through. (b) (5)

-----Original Message-----

From: Jereza, Catherine
Sent: Monday, December 11, 2017 7:48 AM
To: Lucas, John T. <John.T.Lucas@hq.doe.gov>; Dannenfelser, Marty <Marty.Dannenfelser@hq.doe.gov>; Doone, Alison <Alison.Doone@Hq.Doe.Gov>; Loraine, Jennifer A. <Jennifer.Loraine@hq.doe.gov>; Turenne, William <William.Turenne@hq.doe.gov>; Haus, Bob <Bob.Haus@hq.doe.gov>; Menezes, Mark <Mark.Menezes@hq.doe.gov>
Cc: GC Concurrence Actions <GCConcurrenceActions@hq.doe.gov>; Faith, Jayne <Jayne.Faith@hq.doe.gov>; Habansky, Sarah <Sarah.Habansky@hq.doe.gov>; Herron, Vernon <Vernon.Herron@hq.doe.gov>; Cunningham, Derrick <Derrick.Cunningham@hq.doe.gov>; Swisher, Vivian P. (CONTR) <Vivian.Swisher@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Walker, Bruce <Bruce.Walker@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Smith, Julie A (OE) <JulieA.Smith@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Fibbe, George <George.Fibbe@hq.doe.gov>; Lawrence, Shanika <Shanika.Lawrence@hq.doe.gov>; Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Fisher, Travis

<Travis.Fisher@hq.doe.gov>

Subject: OE 202c related by Wed 12/13

(b) (5)

BACKGROUND: Order No. 202-17-4, the Federal Power Act section 202(c) emergency order in effect for PJM and Dominion, ensures reliability in the North Hampton Roads area of Virginia, but it expires on December 13. PJM has requested another 90-day order. By statute, these orders are limited to 90 days in duration, and PJM expects it will need consecutive 202(c) orders through May 2019. In the renewal order, the Department of Energy repeats most of the terms of the current order, mainly requiring that PJM direct the operation of two coal-fired generation units owned by Dominion as needed to address reliability issues. The purpose is to avoid load shedding in the impacted area, which could extend to 150,000 customers including critical infrastructure facilities. This renewal order cross-references a Summary of Findings explaining both the rationale for and legality of the decision to renew Order No. 202-17-4 for another 90 days.

RECOMMENDATION: (b) (5)

Thank you!

Katie

Catherine Jereza
Deputy Assistant Secretary, Transmission Permitting & Technical Assistance
Office of Electricity Delivery & Energy Reliability
U.S. Department of Energy
(o) 202.586.0334
(c) (b) (6)

Shamika Lawrence
Shamika.Lawrence@hq.doe.gov
202.586.4666

** Please contact Shamika for all meeting and scheduling requests. **

From: Bittner, Kathy (CONTR)
To: Lucas, John T.; Dannenfelser, Marty; Doone, Alison; Loraine, Jennifer A.; Turenne, William; Haus, Bob; Menezes, Mark
Cc: GC Concurrence Actions; Faith, Jayne; Habansky, Sarah; Herron, Vernon; Cunningham, Derrick; Hoffman, Patricia; Walker, Bruce; Mills, Brian; Smith, Julie A (OE); Rosenbaum, Matthew; Batra, Rakesh; Konieczny, Katherine; Fibbe, George; Lawrence, Shamika; Fisher, Travis; Jereza, Catherine
Subject: RE: OE 202c related by Wed 12/13
Date: Tuesday, December 12, 2017 10:25:41 AM
Attachments: 2017-008921 - Incoming.pdf
2017-008921- Action Memo to S1 12.8.17.docx
Order 202-18-2 as of 12-11.docx
Order 202-18-2 Summary of Findings 12-11.docx
Importance: High

Good morning,

Attached please find the concurrence package for your review and concurrence.

May I please have your concurrence by 2:30 pm **today**?

Thanks

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Jereza, Catherine

Sent: Monday, December 11, 2017 7:48 AM

To: Lucas, John T. ; Dannenfelser, Marty ; Doone, Alison ; Loraine, Jennifer A. ; Turenne, William ; Haus, Bob ; Menezes, Mark

Cc: GC Concurrence Actions ; Faith, Jayne ; Habansky, Sarah ; Herron, Vernon ; Cunningham, Derrick ; Swisher, Vivian P. (CONTR) ; Hoffman, Patricia ; Walker, Bruce ; Mills, Brian ; Smith, Julie A (OE) ; Rosenbaum, Matthew ; Batra, Rakesh ; Konieczny, Katherine ; Fibbe, George ; Lawrence, Shamika ; Bittner, Kathy (CONTR) ; Fisher, Travis

Subject: OE 202c related by Wed 12/13

(b) (5)

BACKGROUND: Order No. 202-17-4, the Federal Power Act section 202(c) emergency order in effect for PJM and Dominion, ensures reliability in the North Hampton Roads area of Virginia, but it expires on December 13. PJM has requested another 90-day order. By statute, these orders are limited to 90 days in duration, and PJM expects it will need consecutive 202(c) orders through May 2019. In the renewal order, the Department of Energy repeats most of the terms of the current order, mainly requiring that PJM direct the operation of two coal-fired generation units owned by Dominion as needed to address reliability issues. The purpose is to avoid load shedding in the impacted area, which could extend to 150,000 customers including critical infrastructure facilities. This renewal order cross-references a Summary of Findings explaining both the rationale for and legality of the

decision to renew Order No. 202-17-4 for another 90 days.

RECOMMENDATION: (b) (5)

Thank you!

Katie

Catherine Jereza

Deputy Assistant Secretary, Transmission Permitting & Technical Assistance

Office of Electricity Delivery & Energy Reliability

U.S. Department of Energy

(o) 202.586.0334

(c) (b) (6)

Shamika Lawrence

Shamika.Lawrence@hq.doe.gov

202.586.4666

** Please contact Shamika for all meeting and scheduling requests. **



PJM Interconnection, L.L.C.
2750 Monroe Boulevard
Ardubon, PA 19403

Steven R. Pincus
Associate General Counsel
T: (610) 666-4438 | F: (610) 666-8211
steven.pincus@pjm.com

November 29, 2017

The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: Order No. 202-17-4 Renewal Application Filing

Dear Secretary Perry:

Pursuant to Section 202(c) of the Federal Power Act ("FPA"),¹ Section 301(b) of the Department of Energy Organization Act,² the Department of Energy's ("DOE") Rules of Practice and Procedure³ and Order No. 202-17-4 issued on September 14, 2017 by the Secretary of Energy ("Secretary") (the "September 14 Order"), PJM Interconnection, L.L.C. ("PJM") respectfully submits a request for a 90-day renewal of the September 14 Order. PJM incorporates by reference PJM's application submitted on June 13, 2017 (the "June 13 Application") and all attachments and appendices thereto, and PJM's August 24, 2017 renewal application (the "August 24 Application") and all attachments and appendices thereto. PJM also incorporates by reference the various reports to DOE concerning the operations and emission data provided by PJM and Virginia Electric and Power Company ("Dominion Energy Virginia") referenced below.

¹ 16 U.S.C. § 824a(c).

² 42 U.S.C. § § 7101 and 7151(b).

³ 16 C.F.R. §§ 205.370, 205.371 and 205.372 and 205.373.

Background

In the June 13 Application, PJM stated the need to request renewals of the Order No. 202-17-2 issued on June 16, 2017 (the "June 16 Order") on a rolling basis until the PJM ordered Regional Transmission Expansion Planning Process ("RTEPP") Skiffes Creek Transmission Project is placed into service, which was at that time anticipated to be completed in 18-20 months once all permits are issued.⁴ In the June 16 Order, the Secretary determined "that an emergency exists in the Commonwealth of Virginia due to a shortage of electric energy, a shortage of facilities for the generation of electric energy, and other causes, and that issuance of this Order will meet the emergency and serve the public interest."⁵ In doing so, the Secretary directed Dominion Energy Virginia to operate Yorktown Units 1 and 2 as directed by PJM as needed to address reliability issues for the initial 90-day period, June 16, 2017 to September 14, 2017, or any renewal thereof.⁶ The Secretary also directed PJM and Dominion Energy Virginia to develop and implement a dispatch methodology and submit it to the DOE upon implementation.⁷ The dispatch methodology was submitted by PJM on June 27, 2017.

In the August 24 Application, PJM submitted a request for a 90 day renewal of the June 16 Order. PJM requested an order of the Secretary under Section 202 (c) of the FPA which provides among other things that an emergency continues to exist in the Commonwealth of Virginia due to a shortage of electric energy, a shortage of facilities for the generation of electric

⁴ On October 12, 2017, PJM and Dominion Energy Virginia submitted a report updating the outage schedule for the Skiffes Creek Transmission Project with an extension of the construction schedule of approximately five and one-half months from December 30, 2018 to May 12, 2019.

⁵ June 16 Order page 1.

⁶ June 16 Order page 2.

⁷ June 16 Order page 2.

energy, and other causes, and that issuance of a renewal order (*i.e.* the September 14 Order) will meet the emergency and serve the public interest for another 90 renewal period (*i.e.* from September 14, 2017 to December 13, 2017).

In the September 14 Order, the Secretary determined “that an emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation and transmission of electric energy.”⁸ The Secretary granted PJM’s August 24 Application allowing operation of Yorktown Units 1 and 2, with certain modifications, for an additional 90-day period to expire on December 13, 2017.⁹ The Secretary’s directives required PJM and Dominion to “exhaust all reasonably and practically available resources, including demand response and behind-the-meter generation resources, prior to operating Yorktown Unit 1 and Yorktown Unit 2” consistent with “good utility practices” and in compliance with the dispatch methodology.¹⁰

⁸ September 14 Order page 1

⁹ September 14 Order page 1

¹⁰ September 14 Order page 2, paragraphs A and B. PJM has a detailed registration process as applied to demand response resources which are serving as capacity resources. PJM would utilize that information in applying this provision recognizing that: (i) the amount of registered demand response resources on the peninsula is limited; and (ii) during the renewal period covered by this application, certain demand response resources are available to PJM only in the summer period during the period. PJM has catalogued behind the meter resources based on data provided by the United States Energy Information Administration (“EIA”), Dominion and other sources. Although behind the meter resources are not subject to PJM’s direction, PJM works with Dominion to seek their assistance pursuant to the existing dispatch methodology. However, the DOE’s directive that PJM and Dominion Energy Virginia exhaust reasonably and practically available demand response and/or behind-the-meter resources applies only if exhausting such resources would lessen the need to operate the Yorktown Units 1 and/or 2 for reliability of the grid consistent with the dispatch methodology, PJM’s Governing Agreements and good utility practices. For example, if demand response and/or behind-the-meter resources would not provide needed reactive support, or otherwise not lessen the need to operate the Yorktown units for reliability, such resources would not be “reasonably and practically available” and operating the resources would not be consistent with the dispatch methodology, PJM’s Governing Agreements and good utility practices.

The September 14 Order directed PJM and Dominion Energy Virginia to report every two weeks during the term of the September 14 Order all dates on which Yorktown Units 1 and/or 2 are operated and associated air emissions and water usages for those dates.¹¹ The Secretary also directed reporting in the event the outage schedule or estimates changes from those presented in the August 24 Application. PJM and Dominion Energy Virginia submitted reports on September 28, 2017, August 22, 2017 and November 10, 2017, on the operation of Yorktown Units 1 and/or 2, and a report on October 12, 2017 revising the Skiffs Creek Transmission Project construction schedule and providing associated emission estimates.

The September 14 Order stated that “(i)f the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before (the September 14 Order) expires.”¹² As conditions creating the emergency remain substantially unchanged, this renewal application is due on November 29, 2017.

Renewal Request

As stated in the June 13 Application as revised by the August 24 Application, the Skiffes Creek Transmission Project was expected to be completed and placed into service approximately 18-20 months after receipt of all applicable permits. With issuance of the U.S. Army Corps of Engineers’ (“Army Corps”) permit on July 3, 2017, Dominion Energy Virginia started construction of the Skiffes Creek project on July 10, 2017. As reported on October 12, 2017, the Skiffs Creek Transmission Project is scheduled to be completed May 12, 2019. Thus, given the continued extended nature of the emergency, PJM respectfully submits that the emergency as set

¹¹ September 14 Order page 2, paragraph C.

¹² September 14 Order page 2, paragraph D.

forth in the June 13 Application and August 24 Application and as determined by the Secretary in the June 16 Order and September 14 continues to exist.

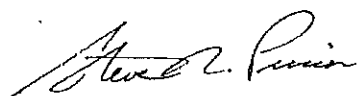
Therefore, PJM respectfully requests that the Secretary grant this renewal application and order the continued operation of Yorktown Units 1 and 2 to alleviate the emergency described in the June 13 Application, the August 24 Application and hereinabove prior to the expiration of the current order (*i.e.* December 13, 2017) under Section 202 (c) of the FPA. PJM request the requested renewal order provide as follows:

- (i) that an emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation and transmission of electric energy and that issuance of a renewal Order will meet the emergency and serve the public interest;
- (ii) from December 13, 2017 to March 13, 2018, Dominion Energy Virginia is directed to operate Yorktown Units 1 and 2 as directed by PJM as needed to maintain grid reliability or for other local area transmission issues;
- (iii) the limitations on operations ensure, to the maximum extent practicable, consistency with applicable laws and regulations, and the reporting requirements for operations and estimated emissions ensure transparency of implementation;
- (iv) consistent with the dispatch methodology submitted by PJM on June 27, 2017, good utility practice and the PJM Tariff, PJM and Dominion Energy Virginia shall exhaust all reasonably and practically available resources including demand response and identified behind-the-meter generation resources to the extent that

such resources address maintenance of grid reliability, prior to operating Yorktown Units 1 and/or 2;¹³

- (v) Dominion Energy Virginia shall continue to follow the dispatch methodology submitted by PJM on June 27, 2017;
- (vi) PJM and Dominion Energy Virginia shall report all dates on which Yorktown Units 1 and/or 2 are operated as well as the estimated emissions and water usage date for those dates within ten (10) business days of such operation; and
- (vii) in the event that the outage schedule or estimates change from those presented in this renewal application, within ten (10) business days PJM and Dominion Energy Virginia shall also provide updated outages schedules and associated Yorktown Units 1 and 2 emission estimates.

Respectfully submitted,



Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.

Craig Glazer
VP, Federal Government Policy
PJM Interconnection, L.L.C.

Cc (via electronic mail): Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Michael C. Regulinski, Dominion Energy Services, Inc.
Casey Roberts, Sierra Club Environmental Law Program

¹³ See Footnote 10.

Johnsen, Steven (MA)

From: Pincus, Steven <Steven.Pincus@pjm.com>
Sent: Wednesday, November 29, 2017 4:13 PM
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Michael Regulinski (Services - 6); casey.roberts@sierraclub.org; Robinson, Evelyn
Subject: Order No. 202-17-4 Renewal Application Filing
Attachments: DOE Order 202-17-4 PJM Renewal Application Letter 11-29-17.pdf

Dear Secretary Perry:

PJM respectfully submits for filing a ninety (90) day Renewal Application in accordance with Section 202(c) of the Federal Power Act, the Department of Energy's Rules of Practice and Procedure and Order No. 202-17-4.

Please contact me if you have any questions.

Thank you for your consideration.

Respectfully,

Steven R. Pincus
Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com
PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

11/29/2017 4:13 PM

From: [Bittner, Kathy \(CONTR\)](#)
To: [Batra, Rakesh](#)
Subject: FW: OE 202c related by Wed 12/13
Date: Tuesday, December 12, 2017 1:01:17 PM
Attachments: [2017-008921- Action Memo to S1 12.8.17.docx](#)
Importance: High

Rakesh,
 Please see Memo for Marty's question.
 Thanks,
 Kathy Bittner
 Correspondence Specialist
 ICF, Contractor for U.S. Department of Energy
 Office of Electricity Delivery and Energy Reliability
 Phone: (202) 287-5613
 Email: kathy.bittner@hq.doe.gov

From: Dannenfelser, Marty
Sent: Tuesday, December 12, 2017 12:59 PM
To: Bittner, Kathy (CONTR)
Subject: RE: OE 202c related by Wed 12/13
 Kathy,
 (b) (5)

Thanks.

Marty

From: Bittner, Kathy (CONTR)
Sent: Tuesday, December 12, 2017 10:26 AM
To: Lucas, John T. <John.T.Lucas@hq.doe.gov>; Dannenfelser, Marty <Marty.Dannenfelser@hq.doe.gov>; Doone, Alison <Alison.Doone@Hq.Doe.Gov>; Loraine, Jennifer A. <Jennifer.Loraine@hq.doe.gov>; Turenne, William <William.Turenne@hq.doe.gov>; Haus, Bob <Bob.Haus@hq.doe.gov>; Menezes, Mark <Mark.Menezes@hq.doe.gov>
Cc: GC Concurrence Actions <GCCConcurrenceActions@hq.doe.gov>; Faith, Jayne <Jayne.Faith@hq.doe.gov>; Habansky, Sarah <Sarah.Habansky@hq.doe.gov>; Herron, Vernon <Vernon.Herron@hq.doe.gov>; Cunningham, Derrick <Derrick.Cunningham@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Walker, Bruce <Bruce.Walker@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Smith, Julie A (OE) <JulieA.Smith@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Fibbe, George <George.Fibbe@hq.doe.gov>; Lawrence, Shamika <Shamika.Lawrence@hq.doe.gov>; Fisher, Travis <Travis.Fisher@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: RE: OE 202c related by Wed 12/13

Importance: High

Good morning,
 Attached please find the concurrence package for your review and concurrence.
 May I please have your concurrence by 2:30 pm **today**?
 Thanks
 Kathy Bittner

Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Jereza, Catherine
Sent: Monday, December 11, 2017 7:48 AM
To: Lucas, John T. <John.T.Lucas@hq.doe.gov>; Dannenfelser, Marty <Marty.Dannenfelser@hq.doe.gov>; Doone, Alison <Alison.Doone@Hq.Doe.Gov>; Loraine, Jennifer A. <Jennifer.Loraine@hq.doe.gov>; Turenne, William <William.Turenne@hq.doe.gov>; Haus, Bob <Bob.Haus@hq.doe.gov>; Menezes, Mark <Mark.Menezes@hq.doe.gov>
Cc: GC Concurrence Actions <GCConcurrenceActions@hq.doe.gov>; Faith, Jayne <Jayne.Faith@hq.doe.gov>; Habansky, Sarah <Sarah.Habansky@hq.doe.gov>; Herron, Vernon <Vernon.Herron@hq.doe.gov>; Cunningham, Derrick <Derrick.Cunningham@hq.doe.gov>; Swisher, Vivian P. (CONTR) <Vivian.Swisher@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Walker, Bruce <Bruce.Walker@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Smith, Julie A (OE) <JulieA.Smith@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Fibbe, George <George.Fibbe@hq.doe.gov>; Lawrence, Shamika <Shamika.Lawrence@hq.doe.gov>; Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Fisher, Travis <Travis.Fisher@hq.doe.gov>
Subject: OE 202c related by Wed 12/13
(b) (5)

BACKGROUND: Order No. 202-17-4, the Federal Power Act section 202(c) emergency order in effect for PJM and Dominion, ensures reliability in the North Hampton Roads area of Virginia, but it expires on December 13. PJM has requested another 90-day order. By statute, these orders are limited to 90 days in duration, and PJM expects it will need consecutive 202(c) orders through May 2019. (b) (5)

This renewal order cross-references a Summary of Findings explaining both the rationale for and legality of the decision to renew Order No. 202-17-4 for another 90 days.

RECOMMENDATION: (b) (5)

Thank you!

Katie

Catherine Jereza

Deputy Assistant Secretary, Transmission Permitting & Technical Assistance
Office of Electricity Delivery & Energy Reliability

U.S. Department of Energy

(o) 202.586.0334

(c) (b) (6)

Shamika Lawrence

Shamika.Lawrence@hq.doe.gov

202.586.4666

** Please contact Shamika for all meeting and scheduling requests. **

From: Konieczny, Katherine
To: Jereza, Catherine; Drake, Christopher
Cc: Batra, Rakesh
Subject: RE: Email to PJM Dominion SC
Date: Wednesday, December 13, 2017 9:29:02 AM

Yes, (b) (5)

The email text you provided works well for today's issuance. Happy travels!

-----Original Message-----

From: Jereza, Catherine
Sent: Wednesday, December 13, 2017 8:59 AM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: Email to PJM Dominion SC

Hi Kathy and Chris - (b) (5)

I have a copy of the email below. (b) (5)

(b) (6)

Thanks!
Katie

To: Steven.Pincus@pjm.com; craig.glazer@pjm.com; michael.regulinski@dominionenergy.com; sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com

CC: Walker, Bruce <Bruce.Walker@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Katherine Konieczny (Katherine.Konieczny@Hq.Doe.Gov); Drake, Christopher <Christopher.Drake@hq.doe.gov>

Subject: DOE Order 202-18-2

Good afternoon,

Today the Secretary of Energy issued Order No. 202-18-2. The Order and Summary of Findings are attached.

Regards,
Katie

From: [Konieczny, Katherine](#)
To: [Batra, Rakesh](#); [Bittner, Kathy \(CONTR\)](#)
Cc: [Drake, Christopher](#)
Subject: RE: OE 202c Wed 12/13
Date: Wednesday, December 13, 2017 9:54:00 PM

The order references the Summary of Findings, so that should also be sent in PDF form to the same distribution list. Please let me or Chris know if we can help.
 -Kathy

From: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Date: Wednesday, Dec 13, 2017, 9:24 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>, Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>
Subject: FW: OE 202c Wed 12/13

Sorry, forgot to Cc you. It was signed and sent.

Thanks for your support.

Rakesh

From: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Date: Wednesday, Dec 13, 2017, 6:39 PM
To: Pincus, Steven <Steven.Pincus@pjm.com>, Glazer, Craig <Craig.Glazer@pjm.com>, Michael Regulinski <michael.regulinski@dominionenergy.com>, sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com <sanjay.narayan@sierraclub.org>, casey.roberts@sierraclub.org <casey.roberts@sierraclub.org>, bridget.lee@sierraclub.org <bridget.lee@sierraclub.org>, kfinto@hunton.com <kfinto@hunton.com>
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: FW: OE 202c Wed 12/13

Attached is the signed Order No. 202-18-2. We will update the website tomorrow.

Thanks
 Rakesh

From: Jereza, Catherine
To: Batra, Rakesh
Subject: RE: OE 202c Wed 12/13
Date: Wednesday, December 13, 2017 10:18:42 PM

Awesome!!!!

From: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Date: Wednesday, Dec 13, 2017, 6:39 PM
To: Pincus, Steven <Steven.Pincus@pjm.com>, Glazer, Craig <Craig.Glazerpjm.com>, Michael Regulinski <michael.regulinski@dominionenergy.com>, sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com <sanjay.narayan@sierraclub.org>, casey.roberts@sierraclub.org <casey.roberts@sierraclub.org>, bridget.lee@sierraclub.org <bridget.lee@sierraclub.org>, kfinto@hunton.com <kfinto@hunton.com>
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: FW: OE 202c Wed 12/13

Attached is the signed Order No. 202-18-2. We will update the website tomorrow.

Thanks
Rakesh

From: Bittner, Kathy (CONTR)
To: Jereza, Catherine; Batra, Rakesh
Subject: RE: PJM 90 day renewal (2017-008921)
Date: Wednesday, December 13, 2017 10:24:54 AM

Katie,

(b) (5)

Thanks,
Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Jereza, Catherine
Sent: Wednesday, December 13, 2017 8:32 AM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: RE: PJM 90 day renewal (2017-008921)

Great - thank you!

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Wednesday, December 13, 2017 7:55 AM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: PJM 90 day renewal (2017-008921)

Good morning Katie,

I have received GC/CI/PA/CFO concurrences on the package and have taken it upstairs to Exec Sec.

(b) (5)

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

From: Fickel, Louise
To: Batra, Rakesh
Cc: Rosenbaum, Matthew
Subject: renewal
Date: Wednesday, December 13, 2017 12:05:54 PM

Good morning Rakesh -

Just checking in to see if the 90-day renewal of the September 14 Order has been issued and is ready for posting on the OE website.

Louise

From: Bittner, Kathy (CONTR)
To: Jereza, Catherine
Cc: Batra, Rakesh; Mills, Brian
Subject: URGENT - RESPONSE NEEDED - RE: PJM 90 day renewal (2017-008921)
Date: Wednesday, December 13, 2017 12:37:12 PM
Importance: High

Katie,

I just received a phone call from Exec Sec. (b) (5)

Please advise.

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Jereza, Catherine
Sent: Wednesday, December 13, 2017 8:32 AM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: RE: PJM 90 day renewal (2017-008921)

Great - thank you!

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Wednesday, December 13, 2017 7:55 AM
To: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: PJM 90 day renewal (2017-008921)

Good morning Katie,

I have received GC/CLPA/CFO concurrences on the package and have taken it upstairs to Exec Sec.

(b) (5)

Kathy Bittner
Correspondence Specialist

ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

From: Bittner, Kathy (CONTR)
To: Bowie, America
Cc: Rosenbaum, Matthew; Batra, Rakesh; Mills, Brian; Jereza, Catherine
Subject: FW: OE 202c related by Wed 12/13
Date: Wednesday, December 13, 2017 1:10:11 PM

Hi America,

Please see email below that Katie sent out on Monday.

OE's POCs for this package are:

DAS/Katie Jereza (b) (6) (cell)
Matt Rosenbaum6-1060 or (b) (6) (cell)
Rakesh Batra6-1283 or (b) (6) (cell)
Brian Mills6-8267

Please let me know if you need additional information.

Thanks,
Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Jereza, Catherine
Sent: Monday, December 11, 2017 7:48 AM
To: Lucas, John T. <John.T.Lucas@hq.doe.gov>; Dammelfelser, Marty <Marty.Dammelfelser@hq.doe.gov>; Doone, Alison <Alison.Doone@Hq.Doe.Gov>; Loraine, Jennifer A. <Jennifer.Loraine@hq.doe.gov>; Turenne, William <William.Turenne@hq.doe.gov>; Haus, Bob <Bob.Haus@hq.doe.gov>; Menezes, Mark <Mark.Menezes@hq.doe.gov>
Cc: GC Concurrence Actions <GCConcurrenceActions@hq.doe.gov>; Faith, Jayne <Jayne.Faith@hq.doe.gov>; Habansky, Sarah <Sarah.Habansky@hq.doe.gov>; Herron, Vernon <Vernon.Herron@hq.doe.gov>; Cunningham, Derrick <Derrick.Cunningham@hq.doe.gov>; Swisher, Vivian P. (CONTR) <Vivian.Swisher@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Walker, Bruce <Bruce.Walker@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Smith, Julie A (OE) <JulieA.Smith@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Fibbe, George <George.Fibbe@hq.doe.gov>; Lawrence, Shamika <Shamika.Lawrence@hq.doe.gov>; Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Fisher, Travis <Travis.Fisher@hq.doe.gov>
Subject: OE 202c related by Wed 12/13

(b) (5)

(b) (5)

BACKGROUND: Order No. 202-17-4, the Federal Power Act section 202(c) emergency order in effect for PJM and Dominion, ensures reliability in the North Hampton Roads area of Virginia, but it expires on December 13. PJM has requested another 90-day order. By statute, these orders are limited to 90 days in duration, and PJM expects it will need consecutive 202(c) orders through May 2019. In the renewal order, the Department of Energy repeats most of the terms of the current order, mainly requiring that PJM direct the operation of two coal-fired generation units owned by Dominion as needed to address reliability issues. The purpose is to avoid load shedding in the impacted area, which could extend to 150,000 customers including critical infrastructure facilities. This renewal order cross-references a Summary of Findings explaining both the rationale for and legality of the decision to renew Order No. 202-17-4 for another 90 days.

RECOMMENDATION: (b) (5)

Thank you!
Katie

Catherine Jereza
Deputy Assistant Secretary, Transmission Permitting & Technical Assistance
Office of Electricity Delivery & Energy Reliability
U.S. Department of Energy
(o) 202.586.0334
(c)(b) (6)

Shamika Lawrence
Shamika.Lawrence@hq.doe.gov
202.586.4666

** Please contact Shamika for all meeting and scheduling requests. **

From: Bowie, America
To: Mills, Brian; Bittner, Kathy (CONTR)
Cc: Rosenbaum, Matthew; Batra, Rakesh; Jereza, Catherine
Subject: RE: OE 202c related by Wed 12/13
Date: Wednesday, December 13, 2017 3:58:53 PM

No. (b) (5)

-----Original Message-----

From: Mills, Brian
Sent: Wednesday, December 13, 2017 3:49 PM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Bowie, America <America.Bowie@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: RE: OE 202c related by Wed 12/13

America:
(b) (5)

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Wednesday, December 13, 2017 1:10 PM
To: Bowie, America <America.Bowie@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: FW: OE 202c related by Wed 12/13

Hi America,

Please see email below that Katie sent out on Monday.

OE's POCs for this package are:

DAS/Katie Jereza (b) (6) (cell)
Matt Rosenbaum 6-1060 or (b) (6) (cell)
Rakesh Batra 6-1283 or (b) (6) (cell)
Brian Mills 6-8267

Please let me know if you need additional information.

Thanks,
Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Jereza, Catherine

Sent: Monday, December 11, 2017 7:48 AM

To: Lucas, John T. <John.T.Lucas@hq.doe.gov>; Dannenfelser, Marty <Marty.Dannenfelser@hq.doe.gov>; Doone, Alison <Alison.Doone@Hq.Doe.Gov>; Loraine, Jennifer A. <Jennifer.Loraine@hq.doe.gov>; Turenne, William <William.Turenne@hq.doe.gov>; Haus, Bob <Bob.Haus@hq.doe.gov>; Menezes, Mark <Mark.Menezes@hq.doe.gov>

Cc: GC Concurrence Actions <GCConcurrenceActions@hq.doe.gov>; Faith, Jayne <Jayne.Faith@hq.doe.gov>; Habansky, Sarah <Sarah.Habansky@hq.doe.gov>; Herron, Vernon <Vernon.Herron@hq.doe.gov>; Cunningham, Derrick <Derrick.Cunningham@hq.doe.gov>; Swisher, Vivian P. (CONTR) <Vivian.Swisher@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Walker, Bruce <Bruce.Walker@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Smith, Julie A (OE) <JulieA.Smith@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Fibbe, George <George.Fibbe@hq.doe.gov>; Lawrence, Shamika <Shamika.Lawrence@hq.doe.gov>; Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Fisher, Travis <Travis.Fisher@hq.doe.gov>

Subject: OE 202c related by Wed 12/13

(b) (5)

BACKGROUND: Order No. 202-17-4, the Federal Power Act section 202(c) emergency order in effect for PJM and Dominion, ensures reliability in the North Hampton Roads area of Virginia, but it expires on December 13. PJM has requested another 90-day order. By statute, these orders are limited to 90 days in duration, and PJM expects it will need consecutive 202(c) orders through May 2019. (b) (5)

. This
renewal order cross-references a Summary of Findings explaining both the rationale for and legality of the decision to renew Order No. 202-17-4 for another 90 days.

RECOMMENDATION: (b) (5)

Thank you!
Katie

Catherine Jereza
Deputy Assistant Secretary, Transmission Permitting & Technical Assistance
Office of Electricity Delivery & Energy Reliability
U.S. Department of Energy
(o) 202.586.0334
(c)(b) (6)

Shamika Lawrence
Shamika.Lawrence@hq.doe.gov
202.586.4666

** Please contact Shamika for all meeting and scheduling requests. **

From: Bowie, America
To: Mills, Brian; Bittner, Kathy (CONTR)
Cc: Rosenbaum, Matthew; Batra, Rakesh; Jereza, Catherine
Subject: RE: OE 202c related by Wed 12/13
Date: Wednesday, December 13, 2017 5:35:48 PM

5:30 Update. (b) (5)

-----Original Message-----

From: Mills, Brian
Sent: Wednesday, December 13, 2017 3:49 PM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Bowie, America <America.Bowie@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: RE: OE 202c related by Wed 12/13

America:
(b) (5)

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Wednesday, December 13, 2017 1:10 PM
To: Bowie, America <America.Bowie@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: FW: OE 202c related by Wed 12/13

Hi America,

Please see email below that Katie sent out on Monday.

OE's POCs for this package are:

DAS/Katie Jereza (b) (6) (cell)
Matt Rosenbaum 6-1060 or (b) (6) (cell)
Rakesh Batra 6-1283 or (b) (6) (cell)
Brian Mills 6-8267

Please let me know if you need additional information.

Thanks,
Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Jereza, Catherine

Sent: Monday, December 11, 2017 7:48 AM

To: Lucas, John T. <John.T.Lucas@hq.doe.gov>; Dannenfelser, Marty <Marty.Dannenfelser@hq.doe.gov>; Doone, Alison <Alison.Doone@Hq.Doe.Gov>; Loraine, Jennifer A. <Jennifer.Loraine@hq.doe.gov>; Turenne, William <William.Turenne@hq.doe.gov>; Haus, Bob <Bob.Haus@hq.doe.gov>; Menezes, Mark <Mark.Menezes@hq.doe.gov>

Cc: GC Concurrence Actions <GCConcurrenceActions@hq.doe.gov>; Faith, Jayne <Jayne.Faith@hq.doe.gov>; Habansky, Sarah <Sarah.Habansky@hq.doe.gov>; Herron, Vernon <Vernon.Herron@hq.doe.gov>; Cunningham, Derrick <Derrick.Cunningham@hq.doe.gov>; Swisher, Vivian P. (CONTR) <Vivian.Swisher@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Walker, Bruce <Bruce.Walker@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Smith, Julie A (OE) <JulieA.Smith@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Fibbe, George <George.Fibbe@hq.doe.gov>; Lawrence, Shamika <Shamika.Lawrence@hq.doe.gov>; Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Fisher, Travis <Travis.Fisher@hq.doe.gov>

Subject: OE 202c related by Wed 12/13

(b) (5)

BACKGROUND: Order No. 202-17-4, the Federal Power Act section 202(c) emergency order in effect for PJM and Dominion, ensures reliability in the North Hampton Roads area of Virginia, but it expires on December 13. PJM has requested another 90-day order. By statute, these orders are limited to 90 days in duration, and PJM expects it will need consecutive 202(c) orders through May 2019. (b) (5)

. This
renewal order cross-references a Summary of Findings explaining both the rationale for and legality of the decision to renew Order No. 202-17-4 for another 90 days.

RECOMMENDATION: (b) (5)

Thank you!
Katie

Catherine Jereza
Deputy Assistant Secretary, Transmission Permitting & Technical Assistance
Office of Electricity Delivery & Energy Reliability
U.S. Department of Energy
(o) 202.586.0334
(c) (b) (6)

Shamika Lawrence
Shamika.Lawrence@hq.doe.gov
202.586.4666

** Please contact Shamika for all meeting and scheduling requests. **

From: Bowie, America
To: Mills, Brian; Bittner, Kathy (CONTR)
Cc: Rosenbaum, Matthew; Batra, Rakesh; Jereza, Catherine
Subject: RE: OE 202c related by Wed 12/13
Date: Wednesday, December 13, 2017 5:54:49 PM
Attachments: EXEC-2017-008921 Signed Order 202-18-2.pdf

Attached is the signed Order No. 202-18-2.

-----Original Message-----

From: Mills, Brian
Sent: Wednesday, December 13, 2017 3:49 PM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Bowie, America <America.Bowie@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: RE: OE 202c related by Wed 12/13

America:
(b) (5)

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Wednesday, December 13, 2017 1:10 PM
To: Bowie, America <America.Bowie@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: FW: OE 202c related by Wed 12/13

Hi America,

Please see email below that Katie sent out on Monday.

OE's POCs for this package are:

DAS/Katie Jereza (b) (6) (cell)
Matt Rosenbaum 6-1060 or (b) (6) (cell)
Rakesh Batra 6-1283 or (b) (6) (cell)
Brian Mills 6-8267

Please let me know if you need additional information.

Thanks,
Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Jereza, Catherine

Sent: Monday, December 11, 2017 7:48 AM

To: Lucas, John T. <John.T.Lucas@hq.doe.gov>; Dannenfelser, Marty <Marty.Dannenfelser@hq.doe.gov>; Doone, Alison <Alison.Doone@Hq.Doe.Gov>; Loraine, Jennifer A. <Jennifer.Loraine@hq.doe.gov>; Turenne, William <William.Turenne@hq.doe.gov>; Haus, Bob <Bob.Haus@hq.doe.gov>; Menezes, Mark <Mark.Menezes@hq.doe.gov>

Cc: GC Concurrence Actions <GCConcurrenceActions@hq.doe.gov>; Faith, Jayne <Jayne.Faith@hq.doe.gov>; Habansky, Sarah <Sarah.Habansky@hq.doe.gov>; Herron, Vernon <Vernon.Herron@hq.doe.gov>; Cunningham, Derrick <Derrick.Cunningham@hq.doe.gov>; Swisher, Vivian P. (CONTR) <Vivian.Swisher@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Walker, Bruce <Bruce.Walker@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Smith, Julie A (OE) <JulieA.Smith@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Fibbe, George <George.Fibbe@hq.doe.gov>; Lawrence, Shamika <Shamika.Lawrence@hq.doe.gov>; Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Fisher, Travis <Travis.Fisher@hq.doe.gov>

Subject: OE 202c related by Wed 12/13

(b) (5)

BACKGROUND: Order No. 202-17-4, the Federal Power Act section 202(c) emergency order in effect for PJM and Dominion, ensures reliability in the North Hampton Roads area of Virginia, but it expires on December 13. PJM has requested another 90-day order. By statute, these orders are limited to 90 days in duration, and PJM expects it will need consecutive 202(c) orders through May 2019. (b) (5)

This
renewal order cross-references a Summary of Findings explaining both the rationale for and legality of the decision to renew Order No. 202-17-4 for another 90 days.

RECOMMENDATION: (b) (5)

Thank you!
Katie

Catherine Jereza
Deputy Assistant Secretary, Transmission Permitting & Technical Assistance
Office of Electricity Delivery & Energy Reliability
U.S. Department of Energy
(o) 202.586.0334
(c)(b) (6)

Shamika Lawrence
Shamika.Lawrence@hq.doe.gov
202.586.4666

** Please contact Shamika for all meeting and scheduling requests. **



Department of Energy
Washington, DC 20585

Order No. 202-18-2

On November 29, 2017, PJM Interconnection, L.L.C. (PJM) submitted *Order No. 202-17-4 Renewal Application Filing* (Renewal Application) to the U.S. Department of Energy (DOE or Department). PJM is the Regional Transmission Operator (RTO) responsible for the reliability of the bulk power grid across several states, including in the North Hampton Roads area of Virginia.¹ Previously, on June 16, 2017, DOE issued Order No. 202-17-2 under section 202(c) of the Federal Power Act (FPA), 16 U.S.C. § 824a(c). That order authorized PJM to direct Virginia Electric and Power Company² (Dominion) to operate coal-fired Units 1 and 2 of its Yorktown Power Station, under certain specified circumstances, and only for a 90-day period. Order No. 202-17-4, issued on September 14, 2017 and under the same statutory authority, renewed Order No. 202-17-2 for an additional 90-day period. Order No. 202-17-4 expires at the end of today, by its own terms and by statute. 16 U.S.C. § 824a(c)(4)(A). In its Renewal Application, PJM asserts that there is a continuing emergency in the North Hampton Roads area of Virginia and asks the Department for another 90-day renewal.

Based on data and information submitted to the Department, and as explained in the accompanying Summary of Findings, I have determined that an emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation and transmission of electric energy. I find that issuance of this Order will meet the emergency and serve the public interest in the North Hampton Roads area, as required by FPA section 202(c). I have imposed limitations on operations outlined in this Order to ensure, to the maximum extent practicable, consistency with applicable environmental laws and regulations, and the reporting requirements for operations and estimated emissions ensure transparency of implementation. Accordingly, I hereby grant PJM's Renewal Application and issue Order No. 202-18-2 to allow operation of Yorktown Units 1 and 2, with modifications as explained below, for an additional 90-day period to expire on March 13, 2018.

¹ PJM has stated that "[t]he North Hampton Roads load area includes . . . Charles City County, James City County, York County, Williamsburg, Yorktown, Newport News, Poquoson, Hampton, Essex County, King William County, King and Queen County, Middlesex County, Mathews County, Gloucester County, the City of West Point, King George County, Westmoreland County, Northumberland County, Richmond County, Lancaster County, and the City of Colonial Beach." *Request for Emergency Order Pursuant to Section 202(c) of the Federal Power Act*, at 1 n.4 (June 13, 2017). Williamsburg, Newport News, Poquoson, and Hampton are independent cities; Yorktown is a Census-Designated Place and the county seat of York County; West Point is a town in King William County; and Colonial Beach is a town in Westmoreland County.

² Virginia Electric and Power Company's parent company is Dominion Energy, Inc.

Department of Energy Order No. 202-18-2

As I have determined that an emergency exists in the North Hampton Roads area of Virginia, I hereby order:

- A. By Eastern Prevailing Time, beginning on December 14, 2017, and continuing through March 13, 2018, in the event that PJM determines that generation from Yorktown Units 1 and/or 2 is needed to maintain grid reliability, Dominion shall operate Units 1 and/or 2 of the Yorktown Power Station as directed by PJM only as needed to address reliability issues. This directive applies under either or both of Scenario One and Scenario Two as described in the accompanying Summary of Findings. This directive incorporates and maintains the operational limitations described in the Environmental Protection Agency's Administrative Compliance Order, AED-CAA-113(a)-2016-0005. Consistent with good utility practice and the dispatch methodology submitted by PJM on June 27, 2017, PJM and Dominion shall exhaust all reasonably and practically available resources, including demand response and identified behind-the-meter generation resources to the extent that such resources provide support to maintain grid reliability, prior to operating Yorktown Unit 1 or Yorktown Unit 2.
- B. Dominion shall continue to comply with the dispatch methodology submitted by PJM on June 27, 2017.
- C. Every two weeks, PJM and Dominion shall report all dates between December 13, 2017 and March 13, 2018, on which Yorktown Units 1 and/or 2 are operated, and the associated air emissions and water usage for those dates. Specifically, PJM and/or Dominion shall report, in units that align with those used in 40 C.F.R. Part 63, Subpart UUUUU, Table 2, the daily air emissions of: 1) filterable particulate matter (PM) or total non-mercury hazardous air pollutant (HAP) metals or individual HAP metals, 2) hydrogen chloride (HCl) or sulfur dioxide (SO₂), and 3) mercury (Hg). PJM and/or Dominion shall also report daily air emissions of greenhouse gases and nitrogen oxides (NO_x) and daily water usage. In the event that the outage schedule or estimates change from those presented in the Renewal Application, PJM and/or Dominion shall also provide updated outage schedules and associated Yorktown Unit 1 and Yorktown Unit 2 emissions estimates within two weeks of such change.
- D. Renewal of this Order, should it be needed, must be requested before this Order expires. If the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before this Order expires. If the conditions change, a renewal request should be submitted at least 21 calendar days before this Order expires.

Issued in Washington, D.C. at 5:45 PM this 13th day of December, 2017.

Rick Perry

Rick Perry
Secretary of Energy

From: Michael Regulinski
To: [Batra, Rakesh](#)
Subject: Re: [External] FW: OE 202c Wed 12/13
Date: Wednesday, December 13, 2017 6:44:41 PM

Thanks Rakesh.

Sent from my iPhone
Please excuse weird auto corrections

On Dec 13, 2017, at 6:40 PM, Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov> wrote:

Attached is the signed Order No. 202-18-2. We will update the website tomorrow.

Thanks
Rakesh

CONFIDENTIALITY NOTICE: This electronic message contains information which may be legally confidential and or privileged and does not in any case represent a firm ENERGY COMMODITY bid or offer relating thereto which binds the sender without an additional express written confirmation to that effect. The information is intended solely for the individual or entity named above and access by anyone else is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution, or use of the contents of this information is prohibited and may be unlawful. If you have received this electronic transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.

From: Konieczny, Katherine
To: Batra, Rakesh
Subject: 202(c)
Date: Wednesday, December 13, 2017 7:55:17 PM

Has the order been signed? (b) (5)

Thanks,
Kathy

From: Pincus, Steven
To: [Batra, Rakesh](#); [Glazer, Craig](#); [Michael Regulinski](#); sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com
Cc: [Jereza, Catherine](#)
Subject: RE: OE 202c Wed 12/13
Date: Thursday, December 14, 2017 9:33:56 AM

The order references a Summary of Findings. Has that been issued yet?

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]
Sent: Wednesday, December 13, 2017 6:39 PM
To: Pincus, Steven; Glazer, Craig; Michael Regulinski; sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com
Cc: Jereza, Catherine
Subject: FW: OE 202c Wed 12/13

External Email! Think before clicking links or attachments.

Attached is the signed Order No. 202-18-2. We will update the website tomorrow.
Thanks
Rakesh

From: [Bowie, America](#)
To: [Batra, Rakesh](#)
Subject: Summary of Findings
Date: Thursday, December 14, 2017 12:03:53 PM
Attachments: [EXEC-2017-008921 Summary of Findings.pdf](#)

Summary of Findings Department of Energy Order No. 202-18-2

December 13, 2017

Section 202(c) of the Federal Power Act (FPA) (codified at 16 U.S.C. § 824a(c)), through section 301(b) of the Department of Energy Organization Act (codified at 42 U.S.C. § 7151(b)), authorizes the Secretary of Energy, upon finding “that an emergency exists by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy, or of fuel or water for generating facilities, or other causes,” to issue an order “requir[ing] . . . such temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy as in [the Secretary’s] judgment will best meet the emergency and serve the public interest.” 16 U.S.C. § 824a(c)(1). If the order “may result in a conflict with [an] environmental law or regulation,” then the Secretary must “ensure that such order requires generation, delivery, interchange, or transmission of electric energy only during hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable, is consistent with any applicable . . . environmental law or regulation and minimizes any adverse environmental impacts.” *Id.* § 824a(c)(2). Orders issued under FPA section 202(c) “that may result in a conflict with [an] environmental law or regulation” expire 90 days after they are issued, but the Secretary “may renew or reissue such order[s] . . . for subsequent periods, not to exceed 90 days for each period, as [the Secretary] determines necessary to meet the emergency and serve the public interest.” *Id.* § 824a(c)(4)(A).

This Summary of Findings incorporates by reference the procedural history, section 202(c) analysis, and environmental analysis in DOE Order Nos. 202-17-2, 202-17-4, and 202-18-1, and the September 14, 2017 and November 6, 2017 Summaries of Findings.

On November 29, 2017, PJM Interconnection, L.L.C. (PJM) filed a Renewal Application with DOE. The filing incorporated by reference all reports required by Order No. 202-17-4, which are included in the docket of this Order. Citing a Virginia Electric and Power Company (Dominion) report dated October 12, 2017 (Report on Yorktown Units 1 and 2 Revised Construction Schedule (Oct. 12, 2017)), PJM stated that construction of the Project is now estimated to be completed May 12, 2019. Renewal Application at 2 n.4 & 4. The October 12 report explained that certain restrictions on construction, implemented by the Virginia Marine Resources Commission and U.S. Army Corps of Engineers, “are imposed to minimize impacts of the installation of transmission tower foundations on anadromous fish species.” Report on Yorktown Units 1 and 2 Revised Construction Schedule at 3. According to Dominion, Virginia Marine Resources Commission restrictions prevent installation of transmission tower foundations in the shallow waters of the James River from February 15 to June 15, and the U.S. Army

Summary of Findings for Department of Energy Order No. 202-18-2

Corps of Engineers prohibits installation of the foundations in the deep waters of that river from February 15 to November 15. *Id.* Consequently, Dominion declared the need to extend the construction schedule to May 2019, adding that “[t]he construction schedule will likely change again.” *Id.* at 4. Also emphasizing that the conditions creating the cited emergency are substantially unchanged, PJM underscored that transmission outages will continue to be required if Project construction is to be completed expeditiously. *See* Renewal Application at 4-5.

Between September 14, 2017 and December 13, 2017, the time period during which Order No. 202-17-4 was in effect, the Yorktown Units were in test operation for a total of just over three and a half hours. Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4, Attachment 1 (Dec. 1, 2017). The “reliability test runs” took place during the afternoon and evening of October 25, and “included running sub-systems and firing of ignitors and warm up burners to functionally test and verify operation for start-up.” Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4, at 2 (Nov. 9, 2017). The testing did not generate power for the grid, but was performed “as part of a quarterly effort to ensure reliability of these two units when called upon by PJM to provide grid stability.” *Id.* Yorktown Units 1 and 2 did not operate over the last 90 days to address a reliability issue.

Discussion

Order Nos. 202-17-2, 202-17-4, and 202-18-2 direct operation of Yorktown Units 1 and 2 as needed to address reliability issues, subject to a dispatch methodology submitted to the Department for review. Dominion has reported operation of Yorktown Units 1 and/or 2 for all or part of 19 days during the pendency of Order Nos. 202-17-2 and 202-17-4. Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4, Attachment 1 (Dec. 1, 2017), included in the docket of this Order.

In the November 29 Renewal Application, PJM sought to clarify how it is implementing ordering paragraphs A and B of Order No. 202-17-4, which require that (1) “Consistent with good utility practice, PJM and Dominion shall exhaust all reasonably and practically available resources, including demand response and behind-the-meter generation resources, prior to operating Yorktown Unit 1 or Yorktown Unit 2,” and (2) “Dominion shall continue to comply with the dispatch methodology submitted by PJM on June 27, 2017.” PJM explained that “if demand response and/or behind-the-meter resources would not provide needed reactive support, or otherwise not lessen the need to operate the Yorktown units for reliability, such resources would not be ‘reasonably and practically available’ and operating the resources would not be consistent with the [terms of Order No. 202-17-4].” Renewal Application at 3 n.10. DOE concurs with this interpretation, and adjustments have been made to the ordering paragraphs of Order No. 202-18-2 to reflect that view.

Summary of Findings for Department of Energy Order No. 202-18-2

In considering renewal or reissuance of an order under FPA section 202(c) that may conflict with an environmental law or regulation, DOE is required to “consult with the primary Federal agency with expertise in the environmental interest protected by such law or regulation” and to include “conditions as such Federal agency determines necessary . . . to the extent practicable.” 16 U.S.C. § 824a(c)(4). The Environmental Protection Agency (EPA) is the primary federal agency in this case with expertise in the protected environmental interest, and the Department consulted with EPA after receiving the Renewal Application. Email from Acting Assistant Administrator Larry Starfield, Office of Enforcement and Compliance Assurance, to Bruce Walker, Assistant Secretary for Electricity Delivery and Energy Reliability (Dec. 11, 2017), included in the docket of this Order. After consulting with EPA, and consistent with that consultation, the Department found that the only appropriate short-term emissions limitation on Yorktown Units 1 and 2 would be to curtail operating hours to the maximum extent practical for reliability purposes.

Pursuant to the National Environmental Policy Act of 1969, the Department has determined that issuance of this Order fits within the category of actions included in Categorical Exclusion (CX) B4.4 and otherwise meets the requirements for application of a CX. The Order fits within the category of actions because it authorizes “[p]ower marketing services and power management activities (including, but not limited to, storage, load shaping and balancing, seasonal exchanges, and other similar activities), provided that the operations of generating projects would remain within normal operating limits.” Records of Categorical Exclusion Determination, Order No. 202-18-2, December 7, 2017, included in the docket of this Order; 10 C.F.R. part 1021, subpt. D, app. B, para. B4.4.

For the reasons stated above, the Secretary of Energy finds that an emergency exists threatening imminent electric energy shortages, and that this Order is necessary to address the emergency and serve the public interest in the North Hampton Roads area. The limitations on operation set forth in Order No. 202-18-2 and outlined above are, to the maximum extent practicable, consistent with applicable environmental laws or regulation and minimize any adverse environmental impacts, and the reporting requirements for operations and estimated emissions ensure transparency of implementation.

From: Pincus, Steven
To: Batra, Rakesh
Subject: RE: OE 202c Wed 12/13
Date: Thursday, December 14, 2017 12:11:27 PM

Thank you.

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]
Sent: Thursday, December 14, 2017 12:09 PM
To: Pincus, Steven; Glazer, Craig; Michael Regulinski; sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com; kfinto@hunton.com
Cc: Jereza, Catherine; Konieczny, Katherine; Drake, Christopher; Bittner, Kathy (CONTR)
Subject: RE: OE 202c Wed 12/13

External Email! Think before clicking links or attachments.

Please find attached Summary of Findings for the Order No. 20-18-2, issued yesterday.

Thanks,
Rakesh

From: Batra, Rakesh
Sent: Wednesday, December 13, 2017 6:39 PM
To: Pincus, Steven <Steven.Pincus@pjm.com>; Glazer, Craig <Craig.Glazer@pjm.com>; Michael Regulinski <michael.regulinski@dominionenergy.com>; sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com <sanjay.narayan@sierraclub.org>; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: FW: OE 202c Wed 12/13

Attached is the signed Order No. 202-18-2. We will update the website tomorrow.

Thanks
Rakesh

From: [Konieczny, Katherine](#)
To: [Batra, Rakesh](#)
Subject: RE: OE 202c Wed 12/13
Date: Thursday, December 14, 2017 12:14:25 PM

Thanks for copying us.

From: Batra, Rakesh
Sent: Thursday, December 14, 2017 12:09 PM
To: Pincus, Steven ; Glazer, Craig ; Michael Regulinski ; sanjay.narayan@sierraclub.org ; casey.roberts@sierraclub.org ; bridget.lee@sierraclub.org ; kfinto@hunton.com ; kfinto@hunton.com
Cc: Jereza, Catherine ; Konieczny, Katherine ; Drake, Christopher ; Bittner, Kathy (CONTR)
Subject: RE: OE 202c Wed 12/13
Please find attached Summary of Findings for the Order No. 20-18-2, issued yesterday.
Thanks,
Rakesh

From: Batra, Rakesh
Sent: Wednesday, December 13, 2017 6:39 PM
To: Pincus, Steven <Steven.Pincus@pjm.com>; Glazer, Craig <Craig.Glazer@pjm.com>; Michael Regulinski <michael.regulinski@dominionenergy.com>; sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com <sanjay.narayan@sierraclub.org>; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: FW: OE 202c Wed 12/13

Attached is the signed Order No. 202-18-2. We will update the website tomorrow.
Thanks
Rakesh

From: Michael Regulinski
To: Batra, Rakesh
Subject: RE: [External] RE: OE 202c Wed 12/13
Date: Thursday, December 14, 2017 12:22:28 PM

Thanks!

Michael C. Regulinski
 Managing General Counsel
 Dominion Energy Services, Inc.
 tieline: 738-2794
 P: (804) 819-2794
 C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]
Sent: Thursday, December 14, 2017 12:10 PM
To: Pincus, Steven; Glazer, Craig; Michael Regulinski (Services - 6); sanjay.narayan@sierracub.org; casey.roberts@sierracub.org; bridget.lee@sierracub.org; kfinto@hunton.com; kfinto@hunton.com
Cc: Jereza, Catherine; Konieczny, Katherine; Drake, Christopher; Bittner, Kathy (CONTR)
Subject: [External] RE: OE 202c Wed 12/13
 Please find attached Summary of Findings for the Order No. 20-18-2, issued yesterday.
 Thanks,
 Rakesh

From: Batra, Rakesh
Sent: Wednesday, December 13, 2017 6:39 PM
To: Pincus, Steven <Steven.Pincus@pjm.com>; Glazer, Craig <Craig.Glazer@pjm.com>; Michael Regulinski <michael.regulinski@dominionenergy.com>; sanjay.narayan@sierracub.org; casey.roberts@sierracub.org; bridget.lee@sierracub.org; kfinto@hunton.com <sanjay.narayan@sierracub.org>; casey.roberts@sierracub.org; bridget.lee@sierracub.org; kfinto@hunton.com
Cc: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Subject: FW: OE 202c Wed 12/13

Attached is the signed Order No. 202-18-2. We will update the website tomorrow.

Thanks
 Rakesh

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From: Drake, Christopher
To: Batra, Rakesh; Fickel, Louise
Cc: Konieczny, Katherine; Mills, Brian; Rosenbaum, Matthew
Subject: RE: PJM OE 202c related
Date: Thursday, December 14, 2017 1:41:32 PM

All of these documents, plus the EPA's 12-11 consultation email, have already been sent to Louise, and the November 29 renewal application has already been posted.

From: Batra, Rakesh
Sent: Thursday, December 14, 2017 1:36 PM
To: Fickel, Louise
Cc: Konieczny, Katherine ; Mills, Brian ; Drake, Christopher ; Rosenbaum, Matthew
Subject: PJM OE 202c related
Importance: High

Louise:

Please find attached PJM 202(c) Order No. 202-18-2 related documents for web posting.

Kathy: (b) (5)

Thanks,

Rakesh

From: Fickel, Louise
To: Drake, Christopher; Batra, Rakesh
Cc: Konieczny, Katherine; Mills, Brian; Rosenbaum, Matthew
Subject: RE: PJM OE 202c related
Date: Thursday, December 14, 2017 1:46:14 PM

Thanks, Chris.

I've posted all of the documents on the website, and they should be live shortly.

Louise

From: Drake, Christopher
Sent: Thursday, December 14, 2017 1:42 PM
To: Batra, Rakesh ; Fickel, Louise
Cc: Konieczny, Katherine ; Mills, Brian ; Rosenbaum, Matthew
Subject: RE: PJM OE 202c related

All of these documents, plus the EPA's 12-11 consultation email, have already been sent to Louise, and the November 29 renewal application has already been posted.

From: Batra, Rakesh
Sent: Thursday, December 14, 2017 1:36 PM
To: Fickel, Louise <Louise.Fickel@Hq.Doe.Gov>
Cc: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: PJM OE 202c related
Importance: High

Louise:

Please find attached PJM 202(c) Order No. 202-18-2 related documents for web posting.

Kathy: (b) (5)

Thanks,

Rakesh

From: Pincus, Steven
To: [Michael Regulinski](#); [Batra, Rakesh](#); [Glazer, Craig](#); kfinto@hunton.com
Cc: [Jereza, Catherine](#); [Konieczny, Katherine](#); [Drake, Christopher](#); [Rosenbaum, Matthew](#)
Subject: RE: 202(c) Renewal Application
Date: Thursday, December 21, 2017 4:28:29 PM

Rakesh: PJM will do the same. Happy Holidays.

Steven R. Pincus
Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com
PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

-----Original Message-----

From: Michael Regulinski [<mailto:michael.regulinski@dominionenergy.com>]
Sent: Thursday, December 21, 2017 2:28 PM
To: [Batra, Rakesh](#); [Pincus, Steven](#); [Glazer, Craig](#); kfinto@hunton.com
Cc: [Jereza, Catherine](#); [Konieczny, Katherine](#); [Drake, Christopher](#); [Rosenbaum, Matthew](#)
Subject: RE: 202(c) Renewal Application

External Email ? Think before clicking links or attachments.

Rakish, Dominion will make every effort to meet staff's request. Happy Holidays! Mike

Michael C. Regulinski
Managing General Counsel

Dominion Energy Services, Inc.
teline: 738-2794
P: (804) 819-2794
C: (b) (6)
michael.regulinski@dominionenergy.com

-----Original Message-----

From: [Batra, Rakesh](#) [<mailto:Rakesh.Batra@Hq.Doe.Gov>]
Sent: Thursday, December 21, 2017 1:55 PM
To: [Pincus, Steven](#); [Glazer, Craig](#); [Michael Regulinski \(Services - 6\)](#); kfinto@hunton.com
Cc: [Jereza, Catherine](#); [Konieczny, Katherine](#); [Drake, Christopher](#); [Rosenbaum, Matthew](#)
Subject: [External] 202(c) Renewal Application

PJM/Dominion Team:

Paragraph D of the Order No. 201-18-2 states "Renewal of this Order, should it be needed, must be requested before this Order expires. If the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before this Order expires. If the conditions change, a renewal request should be submitted at least 21 calendar days before this Order expires."

To process the Order in a timely fashion, the DOE staff requests PJM/Dominion to submit the renewal application case 21 days in advance regardless of whether the conditions change.

Thanks for cooperation.
Rakesh Batra

CONFIDENTIALITY NOTICE: This electronic message contains information which may be legally confidential and or privileged and does not in any case represent a firm ENERGY COMMODITY bid or offer relating thereto which binds the sender without an additional express written confirmation to that effect. The information is intended solely for the individual or entity named above and access by anyone else is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution, or use of the contents of this information is prohibited and may be unlawful. If you have received this electronic transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.

From: Smith, Wayne D
To: Batra, Rakesh; Jereza, Catherine; Bowie, America
Cc: Mills, Brian; Rosenbaum, Matthew; Lawrence, Christopher
Subject: RE: 202c
Date: Monday, January 08, 2018 9:54:14 AM

Thank you.

Wayne D. Smith | Director
Office of the Executive Secretariat
U.S. Department of Energy | wayne.smith@hq.doe.gov
(202) 586-6207 | (b) (6) (mobile)

-----Original Message-----

From: Batra, Rakesh
Sent: Monday, January 08, 2018 9:30 AM
To: Smith, Wayne D <Wayne.Smith@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Bowie, America <America.Bowie@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Lawrence, Christopher <Christopher.Lawrence@hq.doe.gov>
Subject: RE: 202c

We received 202 (c) applications from two applicants, PJM/Dominion and GRDA in 2017.
Attached are the PJM/Dominion Original and two renewal applications and GRDA application.

Please let me know if I could be of further assistance.

Thanks,
Rakesh

-----Original Message-----

From: Jereza, Catherine
Sent: Friday, January 05, 2018 5:52 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Lawrence, Christopher <Christopher.Lawrence@hq.doe.gov>
Subject: FW: 202c

(b) (5)

Thanks!
Katie

-----Original Message-----

From: Jereza, Catherine
Sent: Friday, January 05, 2018 5:38 PM
To: Smith, Wayne D <Wayne.Smith@hq.doe.gov>; Bowie, America <America.Bowie@hq.doe.gov>
Subject: 202c

Hi Wayne and America,

Attached is the DOE implementing regulations document, which provides the information required for requesting an order from the Secretary. (b) (5)

Have a great weekend!
Katie

Catherine Jereza
Deputy Assistant Secretary, Transmission Permitting & Technical Assistance
Office of Electricity Delivery & Energy Reliability
U.S. Department of Energy
(o) 202.586.0334
(c)(b) (6)

Shamika Lawrence
Shamika.Lawrence@hq.doe.gov
202.586.4666

**** Please contact Shamika for all meeting and scheduling requests. ****

From: Smith, Wayne D
To: Batra, Rakesh; Jereza, Catherine; Bowie, America
Cc: Mills, Brian; Rosenbaum, Matthew; Lawrence, Christopher
Subject: RE: 202c
Date: Monday, January 08, 2018 11:10:07 AM
Importance: High

Any updates. (b) (5)

From: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Date: Monday, Jan 08, 2018, 9:56 AM
To: Smith, Wayne D <Wayne.Smith@hq.doe.gov>, Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>, Bowie, America <America.Bowie@hq.doe.gov>
Cc: Mills, Brian <Brian.Mills@hq.doe.gov>, Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>, Lawrence, Christopher <Christopher.Lawrence@hq.doe.gov>
Subject: RE: 202c

Below is the link we discussed.

<https://energy.gov/oe/services/electricity-policy-coordination-and-implementation/other-regulatory-efforts/does-use>

Thanks,
Rakesh

-----Original Message-----

From: Smith, Wayne D
Sent: Monday, January 08, 2018 9:54 AM
To: Batra, Rakesh ; Jereza, Catherine ; Bowie, America
Cc: Mills, Brian ; Rosenbaum, Matthew ; Lawrence, Christopher
Subject: RE: 202c

Thank you.

Wayne D. Smith | Director
Office of the Executive Secretariat
U.S. Department of Energy | wayne.smith@hq.doe.gov
(202) 586-6207 | (b) (6) (mobile)

-----Original Message-----

From: Batra, Rakesh
Sent: Monday, January 08, 2018 9:30 AM
To: Smith, Wayne D ; Jereza, Catherine ; Bowie, America
Cc: Mills, Brian ; Rosenbaum, Matthew ; Lawrence, Christopher
Subject: RE: 202c

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Please let me know if I could be of further assistance.

Thanks,
Rakesh

-----Original Message-----

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Sent: Friday, January 05, 2018 5:52 PM
To: Batra, Rakesh ; Mills, Brian ; Rosenbaum, Matthew ; Lawrence, Christopher
Subject: FW: 202c

(b) (5)

Thanks!
Katie

-----Original Message-----

From: Jereza, Catherine
Sent: Friday, January 05, 2018 5:38 PM
To: Smith, Wayne D ; Bowie, America
Subject: 202c

Hi Wayne and America,

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Have a great weekend!
Katie

Catherine Jereza
Deputy Assistant Secretary, Transmission Permitting & Technical Assistance
Office of Electricity Delivery & Energy Reliability
U.S. Department of Energy
(o) 202.586.0334
(c) (b) (6)

Shamika Lawrence
Shamika.Lawrence@hq.doe.gov
202.586.4666

**** Please contact Shamika for all meeting and scheduling requests. ****

From: Pincus, Steven
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Mars, Jennifer A.; casey.roberts@sierraclub.org
Subject: Order No. 202-18-2 Compliance Filing Re: Report on Dominion Yorktown Units 1 and 2 Operations
Date: Thursday, January 11, 2018 4:40:56 PM
Attachments: DOE Report January 2-8 emission data FINAL.PDF

Dear Secretary Perry:

PJM respectfully submits a report on Yorktown Units 1 and 2 operations in compliance with Order No. 202-18-2.

Please contact me if you have any questions.

Respectfully,

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403



PJM Interconnection, L.L.C.
2750 Monroe Boulevard
Audubon, PA 19403

Steven Pincus
Associate General Counsel
T: (610) 666-4370 | F: (610) 666-8211
Steven.Pincus@pjm.com

January 11, 2018

The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-18-2

Dear Secretary Perry:

Pursuant to Order No. 202-18-2 issued on December 13, 2017 (the “Order”) by the Secretary of Energy (“Secretary”), PJM Interconnection, L.L.C. (“PJM”) and Virginia Electric and Power Company (“Dominion Energy Virginia”) respectfully submit the attached air emissions report regarding PJM’s dispatch of Yorktown Unit 2 from January 2 through 8, 2018, including the periods needed to startup and ramp down the unit January 1 and January 8. This report is submitted in accordance with the Secretary’s directive that every two weeks PJM and Dominion are to “report all dates between December 13, 2017 and March 12, 2018, on which Yorktown Units 1 and/or 2 are operated, and the associated air emissions and water usage data for those dates.”¹

In the Order, the Secretary determined “that an emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation of electric energy.” The Secretary found that the issuance of this Order will meet the emergency and serve the public interest as required by Federal Power Act Section 202(c)² In doing so, the Secretary directed Dominion Energy Virginia to operate Yorktown Units 1 and/or 2 as directed by

¹ Order at page 2. As explained below, complete water usage data for the Unit 2 dispatch was not available in time for this report and will be filed once the data is complete.

² Order at page 1.

PJM only as needed to ensure grid reliability for a 90-day period December 13, 2017 and March 12, 2018.³

On January 1, PJM directed Dominion Energy Virginia to have Yorktown Unit 2 available the next day, and Dominion Energy Virginia began the startup process at approximately 20 hundred hours, and the unit was on line and generating power on January 2 at 17 hundred hours. PJM dispatched the unit off line around 11 hundred hours on January 8, and Dominion Energy Virginia determined that in the interests of safety and good operating practice, the unit would continue to run to empty the bunkers of coal. Emptying of the Yorktown coal bunkers is necessary and a standard operating procedure to prevent fires and to prevent the coal from packing and not flowing after sitting dormant for an extended period. That activity took until about 18 hundred hours on January 8.

Attachment 1 to this report is the Yorktown Power Station Bi-Weekly Mass Emissions for December 26 through January 8 that shows the actual runtime and air emissions data. This spreadsheet includes hourly runtime data for Yorktown Unit 2, hourly gross Megawatt (MW) outputs, and raw and calculated data showing air emissions data associated with operations of Yorktown Unit 2.⁴ PJM did not direct the operation of Yorktown Unit 1 during this time period, and Unit 1 did not operate.

The information in Attachment 1 reports Yorktown Unit 2 hourly emissions of PM-10 and SO₂ in pounds per hour and pounds per million BTU, and mercury in pounds per hour and pounds per trillion BTU (Mercury and Air Toxics Standards (MATS) format) for the operating period beginning December 6, 2017 through January 8, 2018. Additionally, Attachment 1 provides Unit 2 hourly emissions of NO_x in pounds per hour, greenhouse gases (as CO₂) in tons per hour, lead in pounds per hour, HCl in pounds per hour, HF in pounds per hour, and CO in pounds per hour. NO_x and SO₂ emissions are based on valid hours of Continuous Emissions Monitoring System (CEMS) data for the period. PM-10 emissions are

³ Order at page 2.

⁴ The Yorktown units can emit pollution while not generating MWs (*e.g.* during standby, startup and shutdown sequences). Thus, Attachment 1 shows the MW output during the period Yorktown Unit 2 provided power to the grid including startup and shutdown processes (January 1 and 8) and it shows the emissions data for operations of Yorktown Unit 2 including times when the unit was not generating power.

based on the emission factor derived from the July 21, 2017 stack test (0.0168 lbs/mmBtu corrected to 0.1143 lbs/mmBtu calculated for PM-10 filterable plus condensable). CO₂ emissions are based on valid CEMS hours for the operating period. All other emissions were calculated using emission factors from AP-42, Fifth Edition, Volume 1, Chapter 1: External Combustion Sources and calculated hourly coal consumption in tons.⁵

This report does not include the intake circulating water usage for Yorktown Unit 2 operations required by the Order. Operation of cooling water pumps extends over a period of time longer than unit operation to facilitate cooling of plant components that support the boiler and turbine. As a general rule cooling water will continue to be pumped until the turbine metal temperature is less than 300 °F. However, sometimes additional cooling water is necessary to complete proper cool down of auxiliary equipment and lubrication fluids after the turbine metal reaches 300 °F, as was the case with the Yorktown Unit 2 operations in January. PJM and Dominion Energy Virginia commit to providing the water usage data as soon as possible after the data is compiled, reviewed, and formatted to provide to DOE.

PJM and Dominion Energy Virginia respectfully submits the information in this report be accepted by the Secretary as compliant with the Order's directives to report all dates on which Yorktown

⁵ Mercury and lead emissions were calculated using AP-42, Table 1.1-18. CO emissions were calculated using emission factors from AP-42, Table 1.1-3. Total HAP metals and individual HAP metals are not provided because MATS Table 2 (40 CFR 63, Subpart UUUUU) provides for compliance with either the PM limit or total non-mercury HAP metals limits or individual HAP metals. Dominion Energy Virginia is providing PM-10 emissions for the purposes of MATS. HCl and HF emissions were calculated using emission factors from AP-42, Table 1.1-15.

The Honorable James Richard Perry
Re: Report on Yorktown Units 1 and 2
January 11, 2018
Page 4

Units 1 and/or 2 are operated December 13, 2017 and March 12, 2018, as well as the associated air emissions associated with their operations.

Respectfully submitted,

/s/ Steven R. Pincus

Associate General Counsel
PJM Interconnection, L.L.C.
955 Jefferson Avenue
Valley Forge Corporate Center
Norristown, PA 19403-2497
Phone: 610-666-4370
Email: pincus@pjm.com

Michael C. Regulinski
Managing General Counsel
Dominion Energy Services, Inc.
120 Tredegar Street, RS-2
Richmond, Virginia 23219
Phone: (804) 819-2794
Email: michael.regulinski@dominionenergy.com

Cc: Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Michael C. Regulinski, Dominion Energy Services, Inc.
Casey Roberts, Sierra Club Environmental Law Program

Attachment 1

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
December 26, 2017 through January 8, 2018

SUBSTATION Data	Unit 1 Load		Unit 2 Load		Common Stack												
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	SO2 (Lbs/mmBtu)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	PM10 (Lbs/mmBtu)	Lead (Lbs)	Mercury (Lbs)	Mercury (Lbs/Tbtu)	HCl (Lbs)	HF (Lbs)
12-26-2017 00	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 01	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 02	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 03	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 04	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 05	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 06	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 07	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 08	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 09	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 10	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 11	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 12	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 13	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 14	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 15	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 16	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 17	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 18	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 19	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 20	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 21	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 22	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-26-2017 23	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 00	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 01	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 02	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 03	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 04	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 05	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 06	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 07	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 08	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 09	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 10	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 11	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 12	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 13	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 14	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 15	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 16	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 17	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 18	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 19	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 20	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 21	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 22	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-27-2017 23	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 00	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 01	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 02	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 03	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 04	0	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
December 26, 2017 through January 8, 2018

Date & Hour	Unit 1 Load (Gross MW)	Unit 2 Load (Gross MW)	Common Stack												HCl (Lbs)	HF (Lbs)
			Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	SO2 (Lbs/mmBtu)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	PM10 (Lbs/mmBtu)	Lead (Lbs)	Mercury (Lbs)	Mercury (Lbs/Tbtu)		
12-28-2017 05	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 06	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 07	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 08	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 09	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 10	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 11	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 12	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 13	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 14	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 15	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 16	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 17	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 18	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 19	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 20	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 21	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 22	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-28-2017 23	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 00	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 01	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 02	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 03	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 04	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 05	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 06	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 07	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 08	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 09	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 10	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 11	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 12	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 13	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 14	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 15	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 16	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 17	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 18	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 19	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 20	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 21	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 22	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-29-2017 23	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-30-2017 00	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-30-2017 01	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-30-2017 02	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-30-2017 03	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-30-2017 04	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-30-2017 05	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-30-2017 06	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-30-2017 07	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-30-2017 08	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-30-2017 09	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
12-30-2017 10	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
December 26, 2017 through January 8, 2018

Date & Hour	Unit 1 Load		Unit 2 Load		Common Stack													
	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	SO2 (Lbs/mmBtu)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	PM10 (Lbs/mmBtu)	Lead (Lbs)	Mercury (Lbs)	Mercury (Lbs/Tbtu)	HCl (Lbs)	HF (Lbs)		
12-30-2017 11	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-30-2017 12	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-30-2017 13	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-30-2017 14	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-30-2017 15	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-30-2017 16	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-30-2017 17	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-30-2017 18	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-30-2017 19	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-30-2017 20	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-30-2017 21	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-30-2017 22	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-30-2017 23	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 00	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 01	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 02	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 03	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 04	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 05	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 06	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 07	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 08	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 09	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 10	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 11	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 12	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 13	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 14	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 15	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 16	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 17	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 18	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 19	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 20	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 21	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 22	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
12-31-2017 23	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 00	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 01	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 02	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 03	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 04	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 05	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 06	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 07	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 08	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 09	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 10	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 11	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 12	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 13	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 14	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 15	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		
01-01-2018 16	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0		

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
December 26, 2017 through January 8, 2018

SUBMITTER Data	Unit 1 Load		Unit 2 Load		Common Stack												
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	SO2 (Lbs/mmBtu)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	PM10 (Lbs/mmBtu)	Lead (Lbs)	Mercury (Lbs)	Mercury (Lbs/Tbtu)	HCl (Lbs)	HF (Lbs)
	01-01-2018 17	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
	01-01-2018 18	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
	01-01-2018 19	0	0	###	###	###	###	###	###	0.00	0	0	0	0	0	0	0
TRUE TRUE																	

Dominion Energy - Yorktown Power Station
8i-Weekly Mass Emissions
December 26, 2017 through January 8, 2018

Unit 1 Load			Unit 2 Load			Common Stack											
Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	SO2 (Lbs/mmBtu)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	PM10 (Lbs/mmBtu)	Lead (Lbs)	Mercury (Lbs)	Mercury (Lbs/Tbtu)	HCl (Lbs)	HF (Lbs)	
01-03-2018 23	0	144	1.00	1355.1	624.8	2169.3	1.62	137.0	53.19	152.60193	0.1143	0.003778333	0.004414873	3.306772908	63.82948207	7.978685259	
01-04-2018 00	0	145	1.00	1341.9	632.0	2187.4	1.63	137.7	53.46	153.37917	0.1143	0.003797577	0.004437359	3.306772908	64.1548167	8.019322709	
01-04-2018 01	0	145	1.00	1347.3	644.0	2191.4	1.63	138.2	53.68	153.99639	0.1143	0.003812859	0.004455215	3.306772908	64.412749	8.051593625	
01-04-2018 02	0	145	1.00	1349.3	653.1	2193.4	1.63	138.4	53.76	154.22499	0.1143	0.003818519	0.004461829	3.306772908	64.50836653	8.063545817	
01-04-2018 03	0	145	1.00	1352.6	654.7	2197.5	1.62	138.8	53.89	154.60218	0.1143	0.003827858	0.004472741	3.306772908	64.66613546	8.083266932	
01-04-2018 04	0	145	1.00	1348.1	643.0	2205.2	1.64	138.3	53.71	154.08783	0.1143	0.003815123	0.004457861	3.306772908	64.45099602	8.056374502	
01-04-2018 05	0	145	1.00	1353.4	656.4	2197.7	1.62	138.9	53.92	154.69362	0.1143	0.003830122	0.004475386	3.306772908	64.70438247	8.088047809	
01-04-2018 06	0	145	1.00	1359.2	648.3	2212.9	1.63	139.5	54.15	155.35656	0.1143	0.003846536	0.004494566	3.306772908	64.98167331	8.122709163	
01-04-2018 07	0	145	1.00	1361.2	653.4	2226.4	1.64	139.7	54.23	155.58516	0.1143	0.003852196	0.004501179	3.306772908	65.07729084	8.134561355	
01-04-2018 08	0	145	1.00	1347.3	650.7	2226.0	1.65	138.2	53.68	153.99639	0.1143	0.003812859	0.004455215	3.306772908	64.412749	8.051593625	
01-04-2018 09	0	144	1.00	1351.7	659.6	2225.8	1.65	138.7	53.85	154.49931	0.1143	0.003825311	0.004469765	3.306772908	64.62310757	8.077888446	
01-04-2018 10	0	145	1.00	1351.6	667.7	2208.2	1.63	138.7	53.85	154.48788	0.1143	0.003825028	0.004469434	3.306772908	64.61832669	8.077290837	
01-04-2018 11	0	145	1.00	1355.4	658.7	2206.9	1.63	139.1	54.00	154.92222	0.1143	0.003835782	0.004482	3.306772908	64.8	8.1	
01-04-2018 12	0	145	1.00	1355.1	659.9	2207.5	1.63	139.0	53.99	154.88793	0.1143	0.003834933	0.004481008	3.306772908	64.78565737	8.098207171	
01-04-2018 13	0	144	1.00	1346.6	655.8	2217.5	1.65	138.2	53.65	153.91638	0.1143	0.003810878	0.0044529	3.306772908	64.37928287	8.047410359	
01-04-2018 14	0	144	1.00	1351.5	642.0	2219.0	1.64	138.7	53.84	154.47645	0.1143	0.003824745	0.004469104	3.306772908	64.61354582	8.076693227	
01-04-2018 15	0	145	1.00	1351.4	637.9	2231.0	1.65	138.7	53.84	154.46502	0.1143	0.003824462	0.004468773	3.306772908	64.60876494	8.076095618	
01-04-2018 16	0	143	1.00	1350.8	680.8	2241.4	1.66	138.6	53.82	154.39644	0.1143	0.003822764	0.004466789	3.306772908	64.58007968	8.07250996	
01-04-2018 17	0	143	1.00	1379.3	678.6	2321.8	1.68	141.5	54.95	157.65399	0.1143	0.003903419	0.004561032	3.306772908	65.94262948	8.242828685	
01-04-2018 18	0	143	1.00	1388.5	663.7	2349.9	1.69	142.5	55.32	158.70555	0.1143	0.003929455	0.004591454	3.306772908	66.38247012	8.297808765	
01-04-2018 19	0	143	1.00	1393.1	667.3	2343.9	1.68	142.9	55.50	159.23133	0.1143	0.003942473	0.004606665	3.306772908	66.60239044	8.325298805	
01-04-2018 20	0	144	1.00	1388.2	666.3	2341.7	1.69	142.4	55.31	158.67126	0.1143	0.003928606	0.004590462	3.306772908	66.36812749	8.296015936	
01-04-2018 21	0	144	1.00	1389.5	655.8	2323.3	1.67	142.6	55.36	158.81985	0.1143	0.003932285	0.004594761	3.306772908	66.43027888	8.303784861	
01-04-2018 22	0	145	1.00	1385.7	649.9	2313.2	1.67	142.2	55.21	158.38551	0.1143	0.003921231	0.004582195	3.306772908	66.24860558	8.281075697	
01-04-2018 23	0	145	1.00	1393.9	659.3	2318.5	1.66	143.0	55.53	159.32277	0.1143	0.003944737	0.004609311	3.306772908	66.64063745	8.330079681	
01-05-2018 00	0	145	1.00	1380.7	650.3	2306.9	1.67	141.7	55.01	157.81401	0.1143	0.003907381	0.004565661	3.306772908	66.00956175	8.251195219	
01-05-2018 01	0	144	1.00	1393.4	647.9	2309.2	1.66	143.0	55.51	159.26562	0.1143	0.003943922	0.004607657	3.306772908	66.61673307	8.327091633	
01-05-2018 02	0	144	1.00	1390.3	652.1	2301.7	1.66	142.6	55.39	158.91129	0.1143	0.003934549	0.004597406	3.306772908	66.4685259	8.308565737	
01-05-2018 03	0	146	1.00	1385.1	663.5	2295.3	1.66	142.1	55.18	158.31693	0.1143	0.003919833	0.004580211	3.306772908	66.21992032	8.27749004	
01-05-2018 04	0	145	1.00	1346.7	647.8	2224.8	1.65	138.2	53.65	153.92781	0.1143	0.003811161	0.004453231	3.306772908	64.38406375	8.048007968	
01-05-2018 05	0	144	1.00	1342.3	632.2	2214.2	1.65	137.7	53.48	153.42489	0.1143	0.003798709	0.004438681	3.306772908	64.17370518	8.021713147	
01-05-2018 06	0	144	1.00	1339.9	635.1	2220.6	1.66	137.5	53.38	153.15057	0.1143	0.003791917	0.004430745	3.306772908	64.05896414	8.007370518	
01-05-2018 07	0	144	1.00	1336.4	633.5	2213.9	1.66	137.1	53.24	152.75052	0.1143	0.003782012	0.004419171	3.306772908	63.89163347	7.986454183	
01-05-2018 08	0	144	1.00	1338.7	633.2	2219.8	1.66	137.4	53.33	153.01341	0.1143	0.003788521	0.004426777	3.306772908	64.00199369	8.000199203	
01-05-2018 09	0	144	1.00	1338.4	642.4	2215.6	1.66	137.3	53.32	152.97912	0.1143	0.003787672	0.004425785	3.306772908	63.987251	7.998406375	
01-05-2018 10	0	145	1.00	1338.0	628.9	2205.4	1.65	137.3	53.31	152.9334	0.1143	0.00378654	0.004424462	3.306772908	63.96812749	7.996015936	
01-05-2018 11	0	145	1.00	1336.5	634.8	2211.5	1.65	137.1	53.25	152.76195	0.1143	0.003782295	0.004419502	3.306772908	63.89641434	7.987051793	
01-05-2018 12	0	144	1.00	1336.9	633.7	2213.3	1.66	137.2	53.26	152.80767	0.1143	0.003783427	0.004420825	3.306772908	63.91533785	7.989442231	
01-05-2018 13	0	144	1.00	1344.5	642.7	2219.3	1.65	137.9	53.57	153.67635	0.1143	0.003804935	0.004445956	3.306772908	64.27888446	8.034860558	
01-05-2018 14	0	144	1.00	1341.3	643.8	2217.9	1.65	137.6	53.44	153.31059	0.1143	0.003795879	0.004435375	3.306772908	64.12589641	8.015737052	
01-05-2018 15	0	144	1.00	1339.7	639.0	2216.4	1.65	137.5	53.37	153.12771	0.1143	0.003791351	0.004430084	3.306772908	64.04940239	8.006175299	
01-05-2018 16	0	144	1.00	1343.8	645.0	2226.0	1.66	137.9	53.54	153.59634	0.1143	0.003802954	0.004443641	3.306772908	64.24541833	8.030677291	
01-05-2018 17	0	144	1.00	1352.1	643.6	2234.8	1.65	138.7	53.87	154.54503	0.1143	0.003826443	0.004471088	3.306772908	64.64223108	8.080278884	
01-05-2018 18	0	144	1.00	1347.4	656.2	2225.6	1.65	138.2	53.68	154.00782	0.1143	0.003813142	0.004455546	3.306772908	64.41752988	8.052191235	
01-05-2018 19	0	144	1.00	1340.4	646.1	2230.1	1.66	137.5	53.40	153.20772	0.1143	0.003793332	0.004432398	3.306772908	64.08286853	8.010358566	
01-05-2018 20	0	144	1.00	1341.6	642.6	2236.5	1.67	137.6	53.45	153.34488	0.1143	0.003796728	0.004436367	3.306772908	64.14023904	8.01752988	
01-05-2018 21	0	144	1.00	1344.6	644.1	2244.1	1.67	138.0	53.57	153.68778	0.1143	0.003805218	0.004446287	3.306772908	64.28366534	8.035458167	
01-05-2018 22	0	144	1.00	1348.9	644.8	2247.5	1.67	138.4	53.74	154.17927	0.1143	0.003817387	0.004460506	3.306772908	64.48924303	8.061155378	
01-05-2018 23	0	144	1.00	1349.4	638.3	2247.9	1.67	138.4	53.76	154.23642	0.1143	0.003818802	0.004492159	3.306772908	64.51314741	8.064143426	
01-06-2018 00	0	144	1.00	1348.1	639.0	2251.2	1.67	138.3	53.71	154.08783	0.1143	0.003815123	0.004457861	3.306772908	64.45099602	8.056374502	
01-06-2018 01	0	144	1.00	1347.1	635.8												

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
December 26, 2017 through January 8, 2018

Date & Hour	Unit 1 Load (Gross MW)	Unit 2 Load (Gross MW)	Common Stack														
			Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	SO2 (Lbs/mmBtu)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	PM10 (Lbs/mmBtu)	Lead (Lbs)	Mercury (Lbs)	Mercury (Lbs/Tbtu)	HCl (Lbs)	HF (Lbs)	
01-06-2018 05	0	143	1.00	1348.6	637.9	2254.9	1.67	138.4	53.73	154.14498	0.1143	0.003815538	0.004459514	3.306772908	64.4749004	8.05936255	
01-06-2018 06	0	143	1.00	1351.4	639.2	2268.7	1.68	138.7	53.84	154.46502	0.1143	0.003824462	0.004468773	3.306772908	64.60876494	8.076095618	
01-06-2018 07	0	143	1.00	1350.5	632.0	2273.5	1.68	138.6	53.80	154.36215	0.1143	0.003821915	0.004465797	3.306772908	64.56579705	8.070717131	
01-06-2018 08	0	144	1.00	1349.3	622.0	2279.8	1.69	138.4	53.76	154.22499	0.1143	0.003818519	0.004461829	3.306772908	64.50836653	8.063545817	
01-06-2018 09	0	143	1.00	1344.2	645.2	2273.5	1.69	137.9	53.55	153.64206	0.1143	0.003804086	0.004444964	3.306772908	64.26454183	8.033067729	
01-06-2018 10	0	144	1.00	1352.0	638.1	2258.1	1.67	138.7	53.86	154.5336	0.1143	0.00382616	0.004470757	3.306772908	64.6374502	8.079681275	
01-06-2018 11	0	144	1.00	1344.7	625.3	2260.0	1.68	138.0	53.57	153.69921	0.1143	0.003805501	0.004446618	3.306772908	64.28844622	8.036055777	
01-06-2018 12	0	144	1.00	1343.7	626.2	2272.3	1.69	137.9	53.53	153.58491	0.1143	0.003802671	0.004443311	3.306772908	64.24063745	8.030079681	
01-06-2018 13	0	144	1.00	1358.2	626.1	2301.3	1.69	139.4	54.11	155.24226	0.1143	0.003843706	0.004491259	3.306772908	64.93386454	8.116733068	
01-06-2018 14	0	143	1.00	1342.6	629.7	2318.1	1.73	137.7	53.49	153.45918	0.1143	0.003799558	0.004439673	3.306772908	64.18904781	8.023505976	
01-06-2018 15	0	143	1.00	1341.9	632.0	2327.6	1.73	137.7	53.46	153.37917	0.1143	0.003797577	0.004437359	3.306772908	64.15458167	8.019322709	
01-06-2018 16	0	144	1.00	1349.4	626.1	2322.4	1.72	138.4	53.76	154.23642	0.1143	0.003818802	0.004462159	3.306772908	64.51314741	8.064143426	
01-06-2018 17	0	143	1.00	1354.0	620.1	2316.8	1.71	138.9	53.94	154.7622	0.1143	0.00383182	0.004477371	3.306772908	64.73306773	8.091633466	
01-06-2018 18	0	143	1.00	1343.5	630.1	2302.3	1.71	137.8	53.53	153.56205	0.1143	0.003802105	0.004442649	3.306772908	64.2310757	8.028884462	
01-06-2018 19	0	143	1.00	1348.1	625.5	2312.6	1.72	138.3	53.71	154.08783	0.1143	0.003815123	0.004457861	3.306772908	64.45099602	8.056374502	
01-06-2018 20	0	143	1.00	1348.0	622.8	2308.8	1.71	138.3	53.71	154.0764	0.1143	0.00381484	0.00445753	3.306772908	64.44621514	8.055776892	
01-06-2018 21	0	143	1.00	1352.3	630.2	2307.4	1.71	138.8	53.88	154.56789	0.1143	0.003827009	0.004471749	3.306772908	64.65179283	8.081474104	
01-06-2018 22	0	143	1.00	1352.1	616.6	2312.9	1.71	138.7	53.87	154.54503	0.1143	0.003826443	0.004471088	3.306772908	64.64223108	8.080278884	
01-06-2018 23	0	144	1.00	1351.6	613.6	2317.4	1.71	138.7	53.85	154.48788	0.1143	0.003825028	0.004469434	3.306772908	64.61832669	8.077290837	
01-07-2018 00	0	145	1.00	1353.1	630.5	2332.9	1.72	138.8	53.91	154.65933	0.1143	0.003829273	0.004474394	3.306772908	64.69003984	8.08625498	
01-07-2018 01	0	145	1.00	1359.8	632.3	2335.3	1.72	139.5	54.18	155.42514	0.1143	0.003848234	0.00449655	3.306772908	65.01035857	8.126294821	
01-07-2018 02	0	144	1.00	1360.9	649.1	2325.3	1.71	139.6	54.22	155.55087	0.1143	0.003851347	0.004500187	3.306772908	65.06294821	8.132868526	
01-07-2018 03	0	144	1.00	1356.6	613.2	2321.6	1.71	139.2	54.05	155.05938	0.1143	0.003839178	0.004485968	3.306772908	64.85737052	8.107171315	
01-07-2018 04	0	143	1.00	1342.3	597.3	2321.4	1.73	137.7	53.48	153.42489	0.1143	0.003798709	0.004438681	3.306772908	64.17370518	8.021713147	
01-07-2018 05	0	144	1.00	1365.3	621.2	2324.4	1.70	140.1	54.39	156.05379	0.1143	0.003863799	0.004514737	3.306772908	65.27330677	8.159163347	
01-07-2018 06	0	145	1.00	1361.7	637.3	2345.7	1.72	139.7	54.25	155.64231	0.1143	0.003853611	0.004502833	3.306772908	65.10119522	8.137649402	
01-07-2018 07	0	145	1.00	1365.7	643.2	2339.0	1.71	140.1	54.41	156.09951	0.1143	0.003864931	0.00451606	3.306772908	65.29243028	8.161553785	
01-07-2018 08	0	145	1.00	1370.9	652.5	2338.1	1.71	140.6	54.62	156.69387	0.1143	0.003879647	0.004533255	3.306772908	65.54103586	8.192629482	
01-07-2018 09	0	144	1.00	1355.8	660.3	2326.7	1.72	139.1	54.02	154.96794	0.1143	0.003836914	0.004483323	3.306772908	64.81912351	8.102390438	
01-07-2018 10	0	144	1.00	1352.2	668.0	2312.1	1.71	138.7	53.87	154.55646	0.1143	0.003826726	0.004471418	3.306772908	64.64701195	8.080876494	
01-07-2018 11	0	144	1.00	1364.1	669.8	2312.0	1.69	140.0	54.35	155.91663	0.1143	0.003860403	0.004510769	3.306772908	65.21593625	8.151992032	
01-07-2018 12	0	144	1.00	1360.0	667.8	2314.2	1.70	139.5	54.18	155.448	0.1143	0.0038488	0.004497211	3.306772908	65.01992032	8.12749004	
01-07-2018 13	0	145	1.00	1354.0	666.2	2321.7	1.71	138.9	53.94	154.7622	0.1143	0.00383182	0.004477371	3.306772908	64.79306773	8.091633466	
01-07-2018 14	0	144	1.00	1363.7	662.8	2319.3	1.70	139.9	54.33	155.87091	0.1143	0.003859271	0.004509446	3.306772908	65.19681275	8.149601594	
01-07-2018 15	0	144	1.00	1364.9	664.7	2325.8	1.70	140.0	54.38	156.00807	0.1143	0.003862667	0.004513414	3.306772908	65.25418327	8.156772908	
01-07-2018 16	0	144	1.00	1349.1	662.4	2319.9	1.72	138.4	53.75	154.20213	0.1143	0.003817953	0.004461167	3.306772908	64.49880478	8.062350598	
01-07-2018 17	0	144	1.00	1355.0	670.7	2322.7	1.71	139.0	53.98	154.8765	0.1143	0.003834465	0.004480677	3.306772908	64.78087649	8.097609562	
01-07-2018 18	0	144	1.00	1356.8	664.8	2306.7	1.70	139.2	54.06	155.08224	0.1143	0.003839744	0.004486629	3.306772908	64.86693227	8.108366534	
01-07-2018 19	0	145	1.00	1364.8	659.2	2327.0	1.71	140.0	54.37	155.59664	0.1143	0.003862384	0.004513084	3.306772908	65.24940239	8.156175299	
01-07-2018 20	0	145	1.00	1360.4	651.6	2336.1	1.72	139.6	54.20	155.49372	0.1143	0.003849932	0.004498534	3.306772908	65.03904382	8.129880478	
01-07-2018 21	0	145	1.00	1371.2	648.6	2338.6	1.71	140.7	54.63	156.72816	0.1143	0.003880496	0.004534247	3.306772908	65.55537849	8.194422311	
01-07-2018 22	0	145	1.00	1365.0	633.4	2346.2	1.72	140.0	54.38	156.0195	0.1143	0.00386295	0.004513745	3.306772908	65.28896414	8.157370518	
01-07-2018 23	0	145	1.00	1366.4	639.5	2347.0	1.72	140.2	54.44	156.17952	0.1143	0.003866912	0.004518375	3.306772908	65.32589641	8.165797052	
01-08-2018 00	0	145	1.00	1367.4	639.9	2344.2	1.71	140.3	54.48	156.29382	0.1143	0.003869742	0.004521681	3.306772908	65.37370518	8.171713147	
01-08-2018 01	0	145	1.00	1368.5	640.5	2349.3	1.72	140.4	54.52	156.41955	0.1143	0.003872855	0.004525319	3.306772908	65.42629482	8.17826853	
01-08-2018 02	0	145	1.00	1368.6	641.9	2356.1	1.72	140.4	54.53	156.43098	0.1143	0.003873138	0.004525649	3.306772908	65.4310757	8.178884462	
01-08-2018 03	0	145	1.00	1368.0	645.7	2356.3	1.72	140.4	54.50	156.3624	0.1143	0.00387144	0.004523665	3.306772908	65.40239044	8.175298805	
01-08-2018 04	0	145	1.00	1368.9	647.5	2370.3	1.73	140.4	54.54	156.46527	0.1143	0.003873987	0.004526641	3.306772908	65.44541833	8.180677291	
01-08-2018 05	0	145	1.00	1367.5	640.0	2364.1	1.73	140.3	54.48	156.30525	0.1143	0.003870025	0.004522012	3.306772908	65.3784860		

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
December 26, 2017 through January 8, 2018

Summary Date	Unit 1 Load		Unit 2 Load		Common Stack												
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	SO2 (Lbs/mmBtu)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	PM10 (Lbs/mmBtu)	Lead (Lbs)	Mercury (Lbs)	Mercury (Lbs/Tbtu)	HCl (Lbs)	HF (Lbs)
	01-08-2018 11	0	146	1.00	1371.1	584.1	2286.9	1.67	140.7	54.63	156.71673	0.1143	0.003880213	0.004533916	3.306772908	65.55059761	8.193824701
	01-08-2018 12	0	147	1.00	1368.3	587.0	2152.5	1.57	140.4	54.51	156.39669	0.1143	0.003872289	0.004524657	3.306772908	65.41673307	8.177091633
	01-08-2018 13	0	137	1.00	1254.0	491.6	1936.4	1.54	128.7	49.96	143.3322	0.1143	0.00354882	0.004146693	3.306772908	59.95219124	7.494023904
	01-08-2018 14	0	124	1.00	1189.4	437.7	1794.7	1.51	122.0	47.39	135.94842	0.1143	0.003366002	0.003933076	3.306772908	56.86374502	7.107968127
	01-08-2018 15	0	83	1.00	768.5	274.4	1067.6	1.39	78.8	30.62	87.83955	0.1143	0.002174855	0.002541255	3.306772908	36.74103586	4.592629482
	01-08-2018 16	0	47	1.00	520.8	205.2	634.4	1.22	53.4	20.75	59.52744	0.1143	0.001473864	0.001722167	3.306772908	24.89880478	3.112350598
	01-08-2018 17	0	43	1.00	495.3	161.0	574.5	1.16	50.8	19.73	56.61279	0.1143	0.001401699	0.001637845	3.306772908	23.67968127	2.959960159
	01-08-2018 18	0	27	0.67	319.5	105.4	370.5	1.16	32.8	12.73	36.5138208	0.1143	0.00090406	0.001056368	3.306772908	15.27279681	1.909099602
	01-08-2018 19	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
	01-08-2018 20	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
	01-08-2018 21	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
	01-08-2018 22	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
	01-08-2018 23	0	0	0.00	0.0	0.0	0.0	0	0.0	0.00	0	0	0	0	0	0	0
	Bi-Weekly Total Tons				192031.9 mmBtu	44.4	157.6		19702.3	7650.7	10.97462565675		0.00027172520	0.00031750302		4.59040505976	0.57380063247

Note:

All data are collected and processed in accordance with Part 75.

Data with orange fill are substituted in accordance with Part 75.

Monthly sums may not agree with data published by EPA due to the handling of quarterly and annual totals.

From: Pincus, Steven
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Mars, Jennifer A.; casey.roberts@sierraclub.org
Subject: RE: Order No. 202-18-2 Compliance Filing Re: Report on Dominion Yorktown Units 1 and 2 Operations
Date: Thursday, January 25, 2018 4:24:31 PM
Attachments: Dominion Yorktown Report January 2-8 water data January 25, 2018.pdf
DOE Report January 2-8 emission data FINAL.PDF

Dear Secretary Perry:

PJM and Dominion respectfully submit the attached water usage report for PJM's dispatch of Yorktown Unit 2 from January 2 through January 8, 2018, and the periods needed to cool down the plant and associated equipment until January 12, 2018. This report is submitted in compliance with Order No. 202-18-2 and as stated in the Report on Yorktown Unit 2 operations filed by PJM and Dominion Energy Virginia on January 11, 2018 (a copy of the January 11, 2018 Report is attached to this message for your convenience).

Please contact me if you have any questions.

Respectfully,

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

From: Pincus, Steven

Sent: Thursday, January 11, 2018 4:41 PM

To: 'The.Secretary@hq.doe.gov'; 'Hoffman, Patricia'; 'Catherine.Jereza@HQ.DOE.GOV'; 'Batra, Rakesh'; 'Katherine.Konieczny@HQ.DOE.GOV'

Cc: Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Mars, Jennifer A.; casey.roberts@sierraclub.org

Subject: Order No. 202-18-2 Compliance Filing Re: Report on Dominion Yorktown Units 1 and 2 Operations

Dear Secretary Perry:

PJM respectfully submits a report on Yorktown Units 1 and 2 operations in compliance with Order No. 202-18-2.

Please contact me if you have any questions.

Respectfully,

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403



PJM Interconnection, L.L.C.
2750 Monroe Boulevard
Audubon, PA 19403

Steven Pincus
Associate General Counsel
T: (610) 666-4370 | F: (610) 666-8211
Steven.Pincus@pjm.com

January 25, 2018

The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

*Re: Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-18-2
Water Usage Report Associated with Unit 2 Operations Reported to the Secretary on
January 11, 2018*

Dear Secretary Perry:

Pursuant to Order No. 202-18-2 issued on December 13, 2017 (the "Order") by the Secretary of Energy ("Secretary") and as stated in the Report on Yorktown Unit 2 operations submitted to the Secretary on January 11, 2018 (the "January 11 Report"), PJM Interconnection, L.L.C. ("PJM") and Virginia Electric and Power Company ("Dominion Energy Virginia") respectfully submit the attached water usage report regarding PJM's dispatch of Yorktown Unit 2 from January 2 through January 8, 2018, including the periods needed to cool down the plant and associated equipment until January 12. This report is submitted in accordance with the Secretary's directive that every two weeks PJM and Dominion are to "report all dates between December 13, 2017 and March 12, 2018, on which Yorktown Units 1 and/or 2 are operated, and the associated air emissions and water usage data for those dates."¹

The January 11 Report, as reported to the Secretary, is as follows:

On January 1, PJM directed Dominion Energy Virginia to have Yorktown Unit 2 available the next day, and Dominion Energy Virginia began the startup process at

¹ Order at page 2. As explained below, complete water usage data for the Unit 2 dispatch was not available in time for the air emissions report provided in the January 11 Report.

approximately 20 hundred hours, and the unit was on line and generating power on January 2 at about 17 hundred hours. PJM dispatched the unit off line around 11 hundred hours on January 8, and Dominion Energy Virginia determined that in the interests of safety and good operating practice, the unit would continue to run to empty the bunkers of coal. Emptying of the Yorktown coal bunkers is necessary and a standard operating procedure to prevent fires and to prevent the coal from packing and not flowing after sitting dormant for an extended period. That activity took until about 18 hundred hours on January 8.²

As explained in the January 11 Report, additional time was required to compile the water usage data due to operational requirements associated with the cool down of Unit 2's auxiliary equipment and lubrication fluids after the turbine metal reaches 300 °F.³ Thus, the January 11 Report could not include the intake circulating water usage for Yorktown Unit 2 operations and PJM and Dominion Energy Virginia committed to providing this data to the Secretary as soon as possible.

Attachment 1 to this letter is the report concerning the intake circulating water usage for Yorktown Unit 2 operations required by the Order.⁴ PJM and Dominion Energy Virginia respectfully submits the information in this report be accepted by the Secretary as compliant with the Order's directives that every two weeks PJM and Dominion to report all dates on which Yorktown Units 1 and/or 2 are operated between December 13, 2017 and March 12, 2018, as well as the water usage data associated with their operations.

² January 11 Report at page 2.

³ See, January 11 Report at page 3.

⁴ There have been no dispatch operations of Yorktown Unit 1 or Unit 2 from January 11, 2018, to the date of this report.

Respectfully submitted,

/s/ Steven R. Pincus

Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.
955 Jefferson Avenue
Valley Forge Corporate Center
Norristown, PA 19403-2497
Phone: 610-666-4370
Email: pincus@pjm.com

Michael C. Regulinski
Managing General Counsel
Dominion Energy Services, Inc.
120 Tredegar Street, RS-2
Richmond, Virginia 23219
Phone: (804) 819-2794
Email: michael.regulinski@dominionenergy.com

Cc: Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Michael C. Regulinski, Dominion Energy Services, Inc.
Casey Roberts, Sierra Club Environmental Law Program

ATTACHMENT I

Yorktown Power Station January 2-12 2018 Circulating Water Usage

<i>Unit</i>	<i>On-Line</i>	<i>Off-Line</i>	<i>Days On-Line</i>	<i>Start-up Colling Water Pumps</i>	<i>Tubine Metal Temp < 300 deg</i>	<i>Total Cooling Water Days</i>	<i>Total Water Amount (Mgal)</i>
1	NA	NA	NA	NA	NA	NA	0
Million gallons of Intake Circulating Water through Unit 1							0

<i>Unit</i>	<i>On-Line</i>	<i>Off-Line</i>	<i>Days On-Line</i>	<i>Start-up Cooling Water Pumps</i>	<i>Tubine Metal Temp < 300 deg</i>	<i>Total Cooling Water Days</i>	<i>Total Water Amount (Mgal)</i>
2	1/2/18 17:22	1/8/18 18:41	6.05	12/31/17 12:15	1/12/18 11:00	11.95	1,360
Million gallons of Intake Circulating Water through Unit 2							1,360

Total million gallons through Unit 1 & 2							1,360
--	--	--	--	--	--	--	-------

From: Smith, Wayne D
To: Jereza, Catherine
Cc: Bittner, Kathy (CONTR); Blake-Kennerly, Shena; Bowie, America; Batra, Rakesh
Subject: FW: Order 202c
Date: Wednesday, February 14, 2018 6:51:46 PM
Attachments: image002.jpg
PJM Dominion Order Timeline.xlsx

Good evening Katie,
(b) (5)

Thank you in advance for you and your team's assistance.

All best,

Wayne

Wayne D. Smith | Director

Office of the Executive Secretariat

U.S. Department of Energy | wayne.smith@hq.doe.gov

(202) 586-6207 | (b) (6) (mobile)

From: Blake-Kennerly, Shena

Sent: Tuesday, February 13, 2018 5:04 PM

To: Smith, Wayne D <Wayne.Smith@hq.doe.gov>

Subject: FW: Order 202c

(b) (5) Thanks.

From: Bittner, Kathy (CONTR)

Sent: Tuesday, February 13, 2018 1:54 PM

To: Pitcher, Lisa <Lisa.Pitcher@hq.doe.gov>

Cc: Bowie, America <America.Bowie@hq.doe.gov>; Blake-Kennerly, Shena
<Shena.Kennerly@hq.doe.gov>; Minnick, Debra B. (CONTR) <Debra.Minnick@hq.doe.gov>

Subject: RE: Order 202c

Hi Lisa,

(b) (5)

If you have any questions or concerns, please address them to Rakesh Batra, Program Manager, at 6-1283 or Katie Jereza, x 6-0334. They would be able to respond to any inquiry about the 202c process.

Thanks,

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Pitcher, Lisa

Sent: Monday, February 12, 2018 12:17 PM

To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Minnick, Debra B. (CONTR) <Debra.Minnick@hq.doe.gov>

Cc: Bowie, America <America.Bowie@hq.doe.gov>; Blake-Kennerly, Shena <Shena.Kennerly@hq.doe.gov>

Subject: RE: Order 202c

Hi Kathy,

Please have the package to DOE/ES by February 26th (b) (5)

Thanks

Lisa

From: Bittner, Kathy (CONTR)

Sent: Monday, February 12, 2018 11:11 AM

To: Pitcher, Lisa <Lisa.Pitcher@hq.doe.gov>; Minnick, Debra B. (CONTR) <Debra.Minnick@hq.doe.gov>

Cc: Bowie, America <America.Bowie@hq.doe.gov>; Blake-Kennerly, Shena <Shena.Kennerly@hq.doe.gov>

Subject: RE: Order 202c

Hi Lisa,

(b) (5)

Thanks,

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Pitcher, Lisa

Sent: Monday, February 12, 2018 10:45 AM

To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Minnick, Debra B. (CONTR) <Debra.Minnick@hq.doe.gov>

Cc: Bowie, America <America.Bowie@hq.doe.gov>; Blake-Kennerly, Shena <Shena.Kennerly@hq.doe.gov>

Subject: Order 202c

Hi Kathy,

(b) (5)

Please have the package to DOE/ES by COB March 2nd (b) (5)

(b) (5)

Thanks

Lisa Pitcher

*U. S. Department of Energy
Office of Executive Secretariat, MA-71
1000 Independence Avenue SW
Washington, DC 20585
(202) 586-8637 office
(202) 586-6936 fax
lisa.pitcher@hq.doe.gov*

Purpose: To order PJM/Dominion, to operate Yorktown Units 1 and 2 to avoid load shedding across the North Hampton Roads area which could impact over half a million people.

No.	PJM/Dominion 202(C) Proceeding/Order Timeline						
	Activity	Title/Name	Due Day	Due Date		Primary POC	Secondary POC
				All Cases			
1	Last Order		Wednesday	13-Dec-17			
2	Emmissions Data Received		Thursday	11-Jan-18	Every 2 weeks	Brian	Brian/Matt
3	Water Data Received				Every 2 weeks	Brian	Brian/Matt
4	Application & Data Received		Tuesday	20-Feb-18		Rakesh Batra	Brian/Kathy/Matt
5	Confirm Receipt and Inform Exec Sec		Tuesday	20-Feb-18		Rakesh Batra	Brian/Kathy/Matt
6	Review Application		Tuesday	27-Feb-18		Rakesh Batra	Brian/Kathy/Matt
7	Review Data		Tuesday	27-Feb-18		Brian	Brian/Matt
8	EPA Consultation Request		Tuesday	27-Feb-18		Brian/ Kathy K	Julie/ Chris Drakes
9	Senior staff Heads Up		Monday	26-Feb-18	by 3:30PM	Rakesh to Kathy B.	Matt to Kathy B.
10	Draft Order		Thursday	1-Mar-18		Kathy K	Rakesh
11	Summary of Findings		Thursday	1-Mar-18		Kathy K	Rakesh
12	Action Memo		Friday	2-Mar-18		Rakesh Batra	Kathy K
13	NEPA Review/CX		Friday	2-Mar-18		Brian/ Kathy K	Julie/ Chris Drakes
14	EPA Consultation Confirmation	Kellie Ortega	Friday	2-Mar-18		Brian/ Kathy K	Julie/ Chris Drakes
15	Briefing principles		March 2 thru March 12 as required			Rakesh Batra/ Brian Mills	Matt Rosenbaum / Brian Mills
16	Concurrence Staff Availability		Check availability of Concurrence staff and available backup staff - Kathy B.			Rakesh Batra/ Matt Rosenbaum	Matt/Brian
17	Concurrence - OE	DAS - Catherine Jereza	Monday	5-Mar-18		Rakesh Batra	Matt
18	Concurrence - OE	AS - Bruce Walker	Monday	5-Mar-18		Rakesh Batra	Jereza, Catherine
19	Concurrence - CI	DAS -Douglas Little	Tuesday	6-Mar-18		Lisa Pitcher	Tanisha Fuller
20	Concurrence - CF	CFO - John Vonglis	Tuesday	6-Mar-18		Lisa Pitcher	Tanisha Fuller
21	Concurrence - PA	Dir - W Turenne	Thursday	8-Mar-18		Lisa Pitcher	Tanisha Fuller
22	Concurrence - GC	Deputy - John Lucas	Thursday	8-Mar-18		Catherine Jereza	Kathy Bittner
23	Concurrence - S3	Under Sec Mark Menezes	Friday	9-Mar-18		Lisa Pitcher	Tanisha Fuller
24	Concurrence - S2	Deputy Sec - Dan Brouillette	Friday	9-Mar-18		Lisa Pitcher	Tanisha Fuller
25	Concurrence - DCOS	Deputy - Dan Wilmont	Friday	9-Mar-18		Lisa Pitcher	Tanisha Fuller
26	Concurrence - COS	Brian McCormack	Friday	9-Mar-18		Lisa Pitcher	Tanisha Fuller
27	Concurrence -S1	Rick Perry	Monday	12-Mar-18		Lisa Pitcher	Tanisha Fuller
28	Next Order Signed		Monday	12-Mar-18			
29	PJM/Dominion/Siera Club Communication	Steven Pincus / M. Regulinski	Monday	12-Mar-18		Rakesh Batra	Kathy Bittner
30	Website Update	Louise Fickel	Monday	12-Mar-18		Rakesh Batra	Kathy Bittner

- Note:
1. Matthew Rosenbaum and Brian Mills will monitor activity progress every morning, resolve concurrence issues as necessary, and alert Katie of immediately of any delays
 2. Rakesh Batra - Review technical material, Prepare Memo & Concurrence sheet
 3. Brian Mills - Review NEPA material
 4. Kathy K - Prepare draft Order and summary of findings
 5. We do not need concurrence from EPA. Just confirmation if EPA would like to change any conditions.
 6. Rakesh/Brian/Matt from TPTA will standby for briefing principles, if and when required

From: Smith, Wayne D
To: Jereza, Catherine
Cc: Bittner, Kathy (CONTR); Blake-Kennerly, Shena; Bowie, America; Batra, Rakesh
Subject: RE: Order 202c
Date: Thursday, February 15, 2018 8:00:19 AM
Attachments: image001.jpg

Good morning Katie,

Understand all. We'll do whatever it takes to achieve mission success.

All best,
Wayne

From: Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Date: Thursday, Feb 15, 2018, 7:56 AM
To: Smith, Wayne D <Wayne.Smith@hq.doe.gov>
Cc: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>, Blake-Kennerly, Shena <Shena.Kennerly@hq.doe.gov>, Bowie, America <America.Bowie@hq.doe.gov>, Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Subject: RE: Order 202c

Hi Wayne – (b) (5), (b) (6)

Thanks for working with us on this!
Katie

From: Smith, Wayne D
Sent: Wednesday, February 14, 2018 6:52 PM
To: Jereza, Catherine
Cc: Bittner, Kathy (CONTR) ; Blake-Kennerly, Shena ; Bowie, America ; Batra, Rakesh
Subject: FW: Order 202c
Good evening Katie,
(b) (5)

Thank you in advance for you and your team's assistance.
All best,

Wayne

Wayne D. Smith | Director

Office of the Executive Secretariat

U.S. Department of Energy | wayne.smith@hq.doe.gov

(202) 586-6207 | (b) (6) (mobile)

From: Blake-Kennerly, Shena

Sent: Tuesday, February 13, 2018 5:04 PM

To: Smith, Wayne D <Wayne.Smith@hq.doe.gov>

Subject: FW: Order 202c

Can we discuss when you return? Thanks.

From: Bittner, Kathy (CONTR)

Sent: Tuesday, February 13, 2018 1:54 PM

To: Pitcher, Lisa <Lisa.Pitcher@hq.doe.gov>

Cc: Bowie, America <America.Bowie@hq.doe.gov>; Blake-Kennerly, Shena <Shena.Kennerly@hq.doe.gov>; Minnick, Debra B. (CONTR) <Debra.Minnick@hq.doe.gov>

Subject: RE: Order 202c

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Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

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Email: kathy.bittner@hq.doe.gov

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-(5)

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Cc: Bowie, America <America.Bowie@hq.doe.gov>; Blake-Kennerly, Shena

<Shena.Kennerly@hq.doe.gov>

Subject: RE: Order 202c

Hi Lisa,
(b) (5)

Thanks,
Kathy Bittner
Correspondence Specialist
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Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

From: Pitcher, Lisa

Sent: Monday, February 12, 2018 10:45 AM

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Cc: Bowie, America <America.Bowie@hq.doe.gov>; Blake-Kennerly, Shena <Shena.Kennerly@hq.doe.gov>

Subject: Order 202c

Hi Kathy,
(b) (5)

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(b)
(5)

Thanks

Lisa Pitcher

U.S. Department of Energy
Office of Executive Secretariat, MA-71
1000 Independence Avenue SW
Washington, DC 20585
(202) 586-8637 office
(202) 586-6936 fax
lisa.pitcher@hq.doe.gov

From: Pincus, Steven
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Michael Regulinski (Services - 6); casey.roberts@sierraclub.org; Robinson, Evelyn
Subject: Order No. 202-18-2, PJM Interconnection, L.L.C., Renewal Application Filing
Date: Tuesday, February 20, 2018 2:19:34 PM
Attachments: DOE Order 202-18-2 Renewal Application 2-20-18 Filing Letter Final.pdf

Dear Secretary Perry:

PJM respectfully submits for filing a ninety (90) day Renewal Application in accordance with Section 202(c) of the Federal Power Act, the Department of Energy's Rules of Practice and Procedure and Order No. 202-18-24.

Please contact me if you have any questions.

Thank you for your consideration.

Respectfully,

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

This e-mail message and any attached files are confidential and are solely for the use of the intended recipient.



PJM Interconnection, L.L.C.
2750 Monroe Boulevard
Audubon, PA 19403

Steven R. Pincus
Associate General Counsel
T: (610) 666-4438 | F: (610) 666-8211
steven.pincus@pjm.com

February 20, 2018

The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: Order No. 202-18-2 Renewal Application Filing

Dear Secretary Perry:

Pursuant to Section 202(c) of the Federal Power Act (“FPA”),¹ Section 301(b) of the Department of Energy Organization Act,² the Department of Energy’s (“DOE”) Rules of Practice and Procedure³ and Order No. 202-18-2 issued on December 13, 2018 by the Secretary of Energy (“Secretary”) (the “December 13 Order”), PJM Interconnection, L.L.C. (“PJM”) respectfully submits a request for a 90-day renewal of the December 13 Order. PJM incorporates by reference PJM’s initial application submitted on June 13, 2017, and all attachments and appendices thereto (the “June 13 Application”). PJM also incorporates by reference (i) PJM’s renewal applications submitted on November 29, 2017 (the “November 29 Application”), June 13, 2017 (the “June 13 Application”) and August 24, 2017 (the “August24 Application”) and all attachments and appendices thereto (collectively, “Renewal Applications”); and (ii) the various reports to DOE concerning the operations and emission data provided by PJM and Virginia Electric and Power Company (“Dominion Energy Virginia”) referenced below.

¹ 16 U.S.C. § 824a(c).

² 42 U.S.C. § § 7101 and 7151(b).

³ 16 C.F.R. §§ 205.370, 205.371 and 205.372 and 205.373.

I. BACKGROUND

A. *The June 13 Application*

In the Renewal Applications, PJM stated the need to request renewals of the Order No. 202-17-2 issued on June 16, 2017 (the “June 16 Order”) on a rolling basis until the PJM ordered Regional Transmission Expansion Planning Process (“RTEPP”) Skiffes Creek Transmission Project is placed into service, which was originally anticipated to be completed in 18-20 months once all permits are issued.⁴ In the June 16 Order, the Secretary determined “that an emergency exists in the Commonwealth of Virginia due to a shortage of electric energy, a shortage of facilities for the generation of electric energy, and other causes, and that issuance of this Order will meet the emergency and serve the public interest.”⁵ In doing so, the Secretary directed Dominion Energy Virginia to operate Yorktown Units 1 and 2 as directed by PJM as needed to address reliability issues for the initial 90-day period, June 16, 2017 to September 14, 2017, or any renewal thereof.⁶ The Secretary also directed PJM and Dominion Energy Virginia to develop and implement a dispatch methodology and submit it to the DOE upon implementation.⁷ The dispatch methodology was submitted by PJM on June 27, 2017.

B. *The August 24 Application for Renewal of the June 16 Order.*

In the August 24 Application, PJM submitted a request for a 90 day renewal of the June 16 Order. PJM requested an order of the Secretary under Section 202 (c) of the FPA which

⁴ On October 12, 2017, PJM and Dominion Energy Virginia submitted a report updating the outage schedule for the Skiffes Creek Transmission Project with an extension of the construction schedule of approximately five and one-half months from December 30, 2018 to May 12, 2019

⁵ June 16 Order, page 1.

⁶ June 16 Order, page 2.

⁷ June 16 Order, page 2.

provides among other things that an emergency continues to exist in the Commonwealth of Virginia due to a shortage of electric energy, a shortage of facilities for the generation of electric energy, and other causes, and that issuance of a renewal order will meet the emergency and serve the public interest for another 90 renewal period (i.e. from September 14, 2017 to December 13, 2017). As a result, the Secretary issued Order No. 202-17-4 (the “September 14 Order”).

In the September 14 Order, the Secretary determined “that an emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation and transmission of electric energy.”⁸ The Secretary granted PJM’s August 24 Application allowing operation of Yorktown Units 1 and 2, with certain modifications, for an additional 90-day period to expire on December 13, 2017.⁹ The Secretary’s directives required PJM and Dominion to “exhaust all reasonably and practically available resources, including demand response and behind-the-meter generation resources, prior to operating Yorktown Unit 1 and Yorktown Unit 2” consistent with “good utility practices” and in compliance with the dispatch methodology.¹⁰

⁸ September 14 Order page 1

⁹ September 14 Order page 1

¹⁰ September 14 Order, page 2, paragraphs A and B. PJM has a detailed registration process as applied to demand response resources which are serving as capacity resources. PJM would utilize that information in applying this provision recognizing that: (i) the amount of registered demand response resources on the peninsula is limited; and (ii) during the renewal period covered by this application, certain demand response resources are available to PJM only in the summer period during the period. PJM has catalogued behind the meter resources based on data provided by the United States Energy Information Administration (“EIA”), Dominion and other sources. Although behind the meter resources are not subject to PJM’s direction, PJM works with Dominion to seek their assistance pursuant to the existing dispatch methodology. However, the DOE’s directive that PJM and Dominion Energy Virginia exhaust reasonably and practically available demand response and/or behind-the-meter resources applies only if exhausting such resources would lessen the need to operate the Yorktown Units 1 and/or 2 for reliability of the grid consistent with the dispatch methodology, PJM’s Governing Agreements and good utility practices. For example, if demand response and/or behind-the-meter resources would not provide needed reactive support, or otherwise not lessen the need to operate the Yorktown units for reliability, such resources would not be “reasonably

The September 14 Order directed PJM and Dominion Energy Virginia to report every two weeks during the term of the September 14 Order all dates on which Yorktown Units 1 and/or 2 are operated and associated air emissions and water usages for those dates.¹¹ The Secretary also directed reporting in the event the outage schedule or estimates changes from those presented in the August 24 Application. PJM and Dominion Energy Virginia submitted reports on September 28, 2017, August 22, 2017 and November 10, 2017, on the operation of Yorktown Units 1 and/or 2, and a report on October 12, 2017 revising the Skiffs Creek Transmission Project construction schedule and providing associated emission estimates.

The September 14 Order stated that “(i)f the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before (the September 14 Order) expires.”¹² As conditions creating the emergency remain substantially unchanged, the renewal application was due on November 29, 2017.

C. The November 29 Application for Renewal of the September 14 Order.

As conditions creating the emergency remained substantially unchanged from the date of the issuance of the September 14 Order, PJM submitted a 90 day renewal application (*i.e.*, the November 29 application). In the November 29 Application, PJM requested an order of the Secretary under Section 202 (c) of the FPA which provides among other things that an emergency continues to exist in the Commonwealth of Virginia due to a shortage of electric

and practically available” and operating the resources would not be consistent with the dispatch methodology, PJM’s Governing Agreements and good utility practices.

¹¹ September 14 Order page 2, paragraph C.

¹² September 14 Order page 2, paragraph D.

energy, a shortage of facilities for the generation of electric energy, and other causes, and that issuance of a renewal order will meet the emergency and serve the public interest for another 90 renewal period (*i.e.*, from December 14, 2017 to March 13, 2018). As a result, the Secretary issued the December 13 Order.

In the December 13 Order, the Secretary determined “that an emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation and transmission of electric energy.”¹³ The Secretary granted PJM’s November 29 Application allowing operation of Yorktown Units 1 and 2, with certain modifications, for an additional 90-day period to expire on March 13, 2017.¹⁴ The Secretary’s directives require PJM and Dominion to “exhaust all reasonably and practically available resources, including demand response and behind-the-meter generation resources, prior to operating Yorktown Unit 1 and Yorktown Unit 2” consistent with “good utility practices” and in compliance with the dispatch methodology.¹⁵

¹³ December 13 Order, page 1.

¹⁴ December 13 Order, page 1.

¹⁵ December 13 Order, page 2, paragraphs A and B. In the Summary of Findings of Department of Energy Order No. 202-18-2, the Secretary concurred with PJM’s interpretation of the implementing paragraphs A and B of the September 14 Order as follows: *In the November 29 Renewal Application, PJM sought to clarify how it is implementing ordering paragraphs A and B of Order No. 202-17-4, which require that (1) “Consistent with good utility practice, PJM and Dominion shall exhaust all reasonably and practically available resources, including demand response and behind-the-meter generation resources, prior to operating Yorktown Unit 1 or Yorktown Unit 2,” and (2) “Dominion shall continue to comply with the dispatch methodology submitted by PJM on June 27, 2017.” PJM explained that “if demand response and/or behind-the-meter resources would not provide needed reactive support, or otherwise not lessen the need to operate the Yorktown units for reliability, such resources would not be ‘reasonably and practically available’ and operating the resources would not be consistent with the [terms of Order No. 202-17-4].” Renewal Application at 3 n.10. DOE concurs with this interpretation, and adjustments have been made to the ordering paragraphs of Order No. 202-18-2 to reflect that view. December 12 Order page 2.*

The December 13 Order directed PJM and Dominion Energy Virginia to report every two weeks during the term of the December 13 Order all dates on which Yorktown Units 1 and/or 2 are operated and associated air emissions and water usages for those dates.¹⁶ The Secretary also directed reporting in the event the outage schedule or estimates changes from those presented in the November 29 Application. PJM and Dominion Energy Virginia submitted a report to the Secretary on January 11, 2018, on the dates Yorktown Units and/or 2 were operated and associated air emissions (the January 11 Report”). Because the intake circulating water usage data for Yorktown Unit 2 operations was not yet available on January 11, 2018, PJM and Dominion Energy Virginia submitted a report on January 25, 2018, reporting to the secretary the water usage data for Yorktown Unit 2 operations on the dates PJM dispatched Yorktown Unit 2 (*i.e.*, January 2 through January 8, 2018).

The December 13 Order stated that “(i)f the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before (the September 14 Order) expires.”¹⁷ Since the December 13 Order expired on March 13, 2018, PJM respectfully submits this renewal request.

II. RENEWAL REQUEST

As stated in the June 13 Application, the Skiffes Creek Transmission Project was expected to be completed and placed into service approximately 18-20 months after receipt of all applicable permits. With issuance of the U.S. Army Corps of Engineers’ (“Army Corps”) permit

¹⁶ December 13 Order, page 2, paragraph C.

¹⁷ December 13 Order, page 2, paragraph D.

on July 3, 2017, Dominion Energy Virginia started construction of the Skiffes Creek project on July 10, 2017. As reported on October 12, 2017, the Skiffs Creek Transmission Project is scheduled to be completed May 12, 2019.¹⁸

Thus, given the continued extended nature of the emergency, PJM respectfully submits that the emergency continues to exist as set forth in the June 13 Application, and the Renewal Applications and as determined by the Secretary in the June 16 Order, September 14 Order and November 29 Order.

Therefore, PJM respectfully requests that the Secretary grant this renewal application and order the continued operation of Yorktown Units 1 and 2 to alleviate the emergency described in the June 13 Application, and the Renewal Applications prior to the expiration of the current order (*i.e.* March 13, 2017) under Section 202 (c) of the FPA. PJM request the requested renewal order provide as follows:

- (i) that an emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation and transmission of electric energy and that issuance of a renewal Order will meet the emergency and serve the public interest;
- (ii) from March 14, 2017 to June 11, 2018, Dominion Energy Virginia is directed to operate Yorktown Units 1 and 2 as directed by PJM as needed to maintain grid reliability or for other local area transmission issues;

¹⁸ In accordance with the Secretary's directives, PJM will report on changes to the Skiffes Creek Transmission project construction schedule and revised outage schedules as necessary and appropriate.

- (iii) the limitations on operations ensure, to the maximum extent practicable, consistency with applicable laws and regulations, and the reporting requirements for operations and estimated emissions ensure transparency of implementation;
- (iv) consistent with the dispatch methodology submitted by PJM on June 27, 2017, good utility practice and the PJM Tariff, PJM and Dominion Energy Virginia shall exhaust all reasonably and practically available resources including demand response and identified behind-the-meter generation resources to the extent that such resources address maintenance of grid reliability, prior to operating Yorktown Units 1 and/or 2;¹⁹
- (v) Dominion Energy Virginia shall continue to follow the dispatch methodology submitted by PJM on June 27, 2017; and
- (vi) Every two weeks, PJM and Dominion Energy Virginia shall report all dates on which Yorktown Units 1 and/or 2 are operated as well as the estimated emissions and water usage date for those dates; and
- (vii) In the event that the outage schedule or estimates change from those presented in the renewal application, PJM and/or Dominion Energy Virginia shall also provide updated outages schedules and associated Yorktown Units 1 and 2 emission estimates within 2 weeks of such change.

¹⁹ See Footnote 10.

Respectfully submitted,

/s/ Steven R. Pincus

Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.

Craig Glazer
VP, Federal Government Policy
PJM Interconnection, L.L.C.

Cc (via electronic mail): Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Michael C. Regulinski, Dominion Energy Services, Inc.
Casey Roberts, Sierra Club Environmental Law Program

From: [Konieczny, Katherine](#)
To: [Batra, Rakesh](#); [Drake, Christopher](#)
Cc: [Rosenbaum, Matthew](#)
Subject: RE: Can we have the draft Order and Summary of findings please??
Date: Monday, February 26, 2018 2:57:03 PM

Around 5pm.

From: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Date: Monday, Feb 26, 2018, 2:41 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>, Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: Can we have the draft Order and Summary of findings please??

When shall we expect it?

Rakesh

From: [Konieczny, Katherine](#)
To: [Batra, Rakesh](#); [Drake, Christopher](#)
Cc: [Rosenbaum, Matthew](#)
Subject: RE: Can we have the draft Order and Summary of findings please??
Date: Monday, February 26, 2018 4:54:37 PM
Attachments: [DRAFT Order 202-18-3 as of 2-26.docx](#)
[DRAFT Order 202-18-3 Summary of Findings 2-26.docx](#)

The draft materials are attached. Please let us know if you have any questions.

-----Original Message-----

From: Batra, Rakesh
Sent: Monday, February 26, 2018 2:42 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: Can we have the draft Order and Summary of findings please??

When shall we expect it?

Rakesh

From: [Konieczny, Katherine](#)
To: [Batra, Rakesh](#); [Drake, Christopher](#)
Cc: [Rosenbaum, Matthew](#)
Subject: RE: Can we have the draft Order and Summary of findings please??
Date: Tuesday, February 27, 2018 1:59:12 PM
Attachments: [DRAFT Order 202-18-3 as of 2-27.docx](#)
[DRAFT Order 202-18-3 Summary of Findings 2-27.docx](#)

(b) (5)

-----Original Message-----

From: Konieczny, Katherine
Sent: Monday, February 26, 2018 4:55 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Can we have the draft Order and Summary of findings please??

The draft materials are attached. Please let us know if you have any questions.

-----Original Message-----

From: Batra, Rakesh
Sent: Monday, February 26, 2018 2:42 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: Can we have the draft Order and Summary of findings please??

When shall we expect it?

Rakesh

From: Mills, Brian
To: Batra, Rakesh; Konieczny, Katherine; Garg, Rishi; Drake, Christopher
Cc: Jereza, Catherine; Rosenbaum, Matthew
Subject: 202-18-3 CX
Date: Tuesday, February 27, 2018 4:33:17 PM
Attachments: 02_27_2018_CX_PJM_202-18-3.pdf

Attached.



Department of Energy
Washington, DC 20585

February 27, 2018

RECORDS OF CATEGORICAL EXCLUSION DETERMINATION

Order No. 202-18-3

The National Environmental Policy Act (NEPA) requires federal agencies to prepare Environmental Impact Statements (EISs) for major federal actions significantly affecting the quality of the human environment.

The Department of Energy's (DOE's) regulations that implement NEPA (10 C.F.R. Part 1021) require it to determine whether a proposal requires that an EIS, an Environmental Assessment (EA), or a Categorical Exclusion (CX) be prepared. A CX refers to a category of actions that DOE has determined do not individually or cumulatively have a significant effect on the human environment. As such, DOE need not prepare an EA or an EIS for CX actions.

On June 13, 2017, PJM Interconnection, L.L.C. (PJM), the Regional Transmission Organization (RTO) whose service territory includes the North Hampton Roads area east of Richmond, Virginia, filed a *Request for Emergency Order Pursuant to Section 202(c) of the Federal Power Act* (FPA) with the United States DOE "to preserve the reliability of [the] bulk power electric transmission system in the North Hampton Roads area." The emergency order would require Virginia Electric and Power Company (Dominion Energy Virginia), the public utility serving the area, to operate its two coal-fired units at its Yorktown Power Station (Yorktown Unit 1 and Yorktown Unit 2) to react to electricity reliability emergencies.

On June 16, 2017, the Secretary of Energy, on behalf of the DOE, issued Order No. 202-17-2, determining that an electricity reliability emergency exists in the Commonwealth of Virginia, ordering Dominion Energy Virginia to operate Units 1 and 2 of the Yorktown Power Station from June 16, 2017 to September 14, 2017 only when called upon for electricity reliability emergency issues.

On August 24, 2017, PJM filed a *Request for reissuance of DOE Order No. 202-17-2*, with DOE "to preserve the reliability of the bulk power transmission system in the North Hampton Roads area." Reissuance of *DOE Order No. 202-17-2* would require Dominion Energy Virginia, to operate Yorktown Unit 1 and Yorktown Unit 2 to react to reliability emergencies from September 15, 2017 to December 13, 2017.

On September 14, 2017, the Secretary of Energy, on behalf of the DOE, issued Order No. 202-17-4, determining that an electricity reliability emergency exists in the Commonwealth of Virginia, ordering Dominion Energy Virginia to operate Units 1 and 2 of the Yorktown Power

Station from September 15, 2017 to December 13, 2017 only when called upon for electricity reliability emergency issues.

On November 29, 2017, PJM filed a *Request for reissuance of DOE Order No. 202-17-4*, with DOE “to preserve the reliability of the bulk power transmission system in the North Hampton Roads area.” Reissuance of *DOE Order No. 202-17-4* would require Dominion Energy Virginia, to operate Yorktown Unit 1 and Yorktown Unit 2 to react to reliability emergencies from December 14, 2017 to March 13, 2018.

On December 13, 2017, the Secretary of Energy, on behalf of the DOE, issued Order No. 202-18-2, determining that an electricity reliability emergency exists in the Commonwealth of Virginia, ordering Dominion Energy Virginia to operate Units 1 and 2 of the Yorktown Power Station from December 13, 2017 to March 13, 2018 only when called upon for electricity reliability emergency issues.

On February 20, 2018, PJM filed a *Request for reissuance of DOE Order No. 202-18-2*, with DOE “to preserve the reliability of the bulk power transmission system in the North Hampton Roads area.” Reissuance of *DOE Order No. 202-18-2* would require Dominion Energy Virginia, to operate Yorktown Unit 1 and Yorktown Unit 2 to react to reliability emergencies from March 13, 2018 to June 11, 2018.

PROPOSED ACTION: The DOE proposed Federal action would be the reissuance of DOE Order No. 202-18-2, as DOE Order No. 202-18-3, an emergency order targeted to prevent uncontrolled power disruptions and shedding of critical load in the North Hampton Roads area on the Virginia Peninsula for 90 days.

FPA section 202(c) (2) requires the Secretary of Energy to ensure that any 202(c) order that may result in a conflict with a requirement of any environmental law be limited to the “hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable,” be consistent with any applicable environmental law and minimize any adverse environmental impacts.

BACKGROUND: In November 2011, and again in October 2012, Dominion Energy Virginia notified PJM of its plan to deactivate both units, effective December 31, 2014, because the units were not equipped to comply with the Environmental Protection Agency’s (EPA) Mercury and Air Toxics Standards (MATS), 40 C.F.R. part 63 subpart UUUUU.

By letters dated December 14, 2011 and April 11, 2014, PJM notified Dominion Energy Virginia that the deactivation of Yorktown Units 1 and 2 respectively would adversely affect the PJM transmission system absent the installation of certain transmission upgrades necessary to address the reliability impacts. PJM included the required transmission upgrade known as the Skiffes Creek Transmission Project a new 500kV transmission line across the James River as an upgrade.

PJM load flow studies indicate that generation from Yorktown Units 1 and 2 will be needed to prevent the possibility of uncontrolled power disruptions in the North Hampton Roads area or other loss of grid reliability such as the implementation of an automated controlled load shed scheme.

Dominion Energy Virginia developed, an automated controlled load shed scheme known as the Remedial Action Scheme ("RAS") or as the "North Hampton RAS" to address deactivation of the Yorktown Units. The North Hampton RAS" would result in a forced interruption of service to load on the Peninsula. During certain high load conditions, this power interruption could result in power loss effecting over 150,000 customers in the North Hampton Roads^a area of Virginia. In addition to residential customers, hospitals, nursing homes, schools, commercial, industrial, and national defense facilities would be without power during those peak load conditions on the Peninsula.

CX TO BE APPLIED: The proposed action identified above fits within the classes listed in Appendix B to Subpart D, of 10 CFR Part 1021-Categorical exclusions applicable to specific agency actions. Specifically:

B4.4 Power marketing services and activities.

Power marketing services and power management activities (including, but not limited to, storage, load shaping and balancing, seasonal exchanges, and other similar activities), provided that the operations of generating projects would remain within normal operating limits.

REGULATORY REQUIREMENT: The DOE proposed action is the reissuance of DOE Order No. 202-18-2, as DOE Order No. 202-18-3. The DOE Order reissuance will continue the operational limitations described for electricity reliability emergency issues.

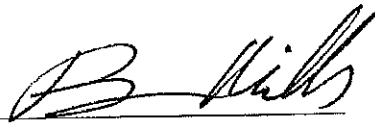
The expected combined operation of Yorktown Units 1 and 2 reacting to electricity reliability emergencies under DOE Order No. 202-18-2 will be well below normal operating capacities and limits of Yorktown Units 1 and 2.

DOE has determined that the proposed action identified above will not have a significant effect on the human environment. Authorizing the proposed action will not (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health including DOE and/or Executive orders; (2) require siting of new facilities or expansion of existing facilities; (3) disturb hazardous substances, pollutants or contaminants; or (4) adversely affect environmentally sensitive resources.

DETERMINATION: Based on my review of the above information concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class of actions, other regulatory

^a The North Hampton Roads load area includes the following: Charles City County, James City County, York County, Williamsburg, Yorktown, Newport News, Poquoson, Hampton, Essex County, King William County, King and Queen County, Middlesex County, Mathews County, Gloucester County, the City of West Point, King George County, Westmoreland County, Northumberland County, Richmond County, Lancaster County, and the City of Colonial Beach.

requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

Signature: 
Brian Mills
NEPA Compliance Officer
Office of Electricity Delivery
and Energy Reliability

Date: February 27, 2018

From: Bittner, Kathy (CONTR)
To: Batra, Rakesh
Cc: Rosenbaum, Matthew
Subject: RE: Can we have the draft Order and Summary of findings please??
Date: Wednesday, February 28, 2018 8:37:23 AM
Attachments: 2018-001014 - Action Memo 2.28.docx
Importance: High

Rakesh,

(b) (5)

Please let me know as soon as possible.

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Batra, Rakesh
Sent: Tuesday, February 27, 2018 3:49 PM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: FW: Can we have the draft Order and Summary of findings please??

FYI. All documents attached (b) (5)

Thanks,
Rakesh

-----Original Message-----

From: Konieczny, Katherine
Sent: Tuesday, February 27, 2018 1:59 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Can we have the draft Order and Summary of findings please??

(b) (5)

(b) (5)

-----Original Message-----

From: Konieczny, Katherine

Sent: Monday, February 26, 2018 4:55 PM

To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>

Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: RE: Can we have the draft Order and Summary of findings please??

The draft materials are attached. Please let us know if you have any questions.

-----Original Message-----

From: Batra, Rakesh

Sent: Monday, February 26, 2018 2:42 PM

To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>

Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: Can we have the draft Order and Summary of findings please??

When shall we expect it?

Rakesh

From: Bittner, Kathy (CONTR)
To: Batra, Rakesh
Cc: Rosenbaum, Matthew; Mills, Brian
Subject: FW: Can we have the draft Order and Summary of findings please??
Date: Wednesday, February 28, 2018 8:56:27 AM
Attachments: DRAFT Order 202-18-3 Summary of Findings 2-27.docx
Importance: High

Rakesh,
Please see my questions/comments on the attachment.

Please address them as soon as possible.

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Batra, Rakesh
Sent: Tuesday, February 27, 2018 3:49 PM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: FW: Can we have the draft Order and Summary of findings please??

FYI. All documents attached. (b) (5)

Thanks,
Rakesh

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(b) (5)

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Sent: Monday, February 26, 2018 4:55 PM

To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
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Subject: RE: Can we have the draft Order and Summary of findings please??

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From: Batra, Rakesh
Sent: Monday, February 26, 2018 2:42 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: Can we have the draft Order and Summary of findings please??

When shall we expect it?

Rakesh

From: Mills, Brian
To: Bittner, Kathy (CONTR); Batra, Rakesh
Cc: Rosenbaum, Matthew
Subject: RE: Can we have the draft Order and Summary of findings please??
Date: Wednesday, February 28, 2018 9:03:11 AM
Attachments: 02_27_2018_CX_PJM 202-18-3.pdf

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Wednesday, February 28, 2018 8:56 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>
Subject: FW: Can we have the draft Order and Summary of findings please??
Importance: High

Rakesh,
Please see my questions/comments on the attachment.

Please address them as soon as possible.

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

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From: Batra, Rakesh
Sent: Tuesday, February 27, 2018 3:49 PM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: FW: Can we have the draft Order and Summary of findings please??

FYI. All documents attached. (b) (5)

Thanks,
Rakesh

-----Original Message-----

From: Konieczny, Katherine
Sent: Tuesday, February 27, 2018 1:59 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Can we have the draft Order and Summary of findings please??

(b) (5)

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From: Konieczny, Katherine

Sent: Monday, February 26, 2018 4:55 PM

To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>

Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: RE: Can we have the draft Order and Summary of findings please??

The draft materials are attached. Please let us know if you have any questions.

-----Original Message-----

From: Batra, Rakesh

Sent: Monday, February 26, 2018 2:42 PM

To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>

Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: Can we have the draft Order and Summary of findings please??

When shall we expect it?

Rakesh

From: Bittner, Kathy (CONTR)
To: Batra, Rakesh; Mills, Brian
Cc: Rosenbaum, Matthew
Subject: RE: Can we have the draft Order and Summary of findings please??
Date: Wednesday, February 28, 2018 9:21:18 AM

Rakesh,

(b) (5)

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Batra, Rakesh
Sent: Wednesday, February 28, 2018 9:18 AM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Can we have the draft Order and Summary of findings please??

Dec. 11, 2017. Please see my email sent separately.

(b) (5)

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Wednesday, February 28, 2018 9:04 AM
To: Mills, Brian <Brian.Mills@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Can we have the draft Order and Summary of findings please??

Thank you Brian.

-----Original Message-----

From: Mills, Brian
Sent: Wednesday, February 28, 2018 9:03 AM
To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Can we have the draft Order and Summary of findings please??

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Wednesday, February 28, 2018 8:56 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>
Subject: FW: Can we have the draft Order and Summary of findings please??
Importance: High

Rakesh,

Please see my questions/comments on the attachment.

Please address them as soon as possible.

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

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To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>
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FYI. All documents attached. (b) (5)

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Rakesh

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Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Can we have the draft Order and Summary of findings please??

(b) (5)

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Sent: Monday, February 26, 2018 4:55 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Can we have the draft Order and Summary of findings please??

The draft materials are attached. Please let us know if you have any questions.

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From: Batra, Rakesh
Sent: Monday, February 26, 2018 2:42 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher

<Christopher.Drake@hq.doe.gov>

Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: Can we have the draft Order and Summary of findings please??

When shall we expect it?

Rakesh

From: Konieczny, Katherine
To: Batra, Rakesh; Drake, Christopher
Cc: Bittner, Kathy (CONTR)
Subject: RE: PJM OE 202c related
Date: Wednesday, February 28, 2018 9:34:19 AM

Good morning, all,
(b) (5)

From: Batra, Rakesh
Sent: Wednesday, February 28, 2018 9:16 AM
To: Konieczny, Katherine ; Drake, Christopher
Cc: Bittner, Kathy (CONTR)
Subject: FW: PJM OE 202c related
Importance: High
Kathy K:
(b) (5)

Rakesh

From: Batra, Rakesh
Sent: Thursday, December 14, 2017 1:36 PM
To: Fickel, Louise <Louise.Fickel@Hq.Doe.Gov>
Cc: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: PJM OE 202c related
Importance: High
Louise:
Please find attached PJM 202(c) Order No. 202-18-2 related documents for web posting.
Kathy: (b) (5)
Thanks,
Rakesh

From: Bittner, Kathy (CONTR)
To: Batra, Rakesh
Subject: 2018-001014 - Review of 202c Action Memo
Date: Wednesday, February 28, 2018 10:09:10 AM
Attachments: 2018-001014 - Action Memo 2.28.docx
Importance: High

Rakesh,

(b) (5)

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Bittner, Kathy (CONTR)
Sent: Wednesday, February 28, 2018 8:37 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Can we have the draft Order and Summary of findings please??
Importance: High

Rakesh,

(b) (5)

Please let me know as soon as possible.

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Phone: (202) 287-5613
Email: kathy.bittner@hq.doe.gov

-----Original Message-----

From: Batra, Rakesh
Sent: Tuesday, February 27, 2018 3:49 PM

To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: FW: Can we have the draft Order and Summary of findings please??

FYI. All documents attached. (b) (5)

Thanks,
Rakesh

-----Original Message-----

From: Konieczny, Katherine
Sent: Tuesday, February 27, 2018 1:59 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Can we have the draft Order and Summary of findings please??

(b) (5)

-----Original Message-----

From: Konieczny, Katherine
Sent: Monday, February 26, 2018 4:55 PM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Can we have the draft Order and Summary of findings please??

The draft materials are attached. Please let us know if you have any questions.

-----Original Message-----

From: Batra, Rakesh
Sent: Monday, February 26, 2018 2:42 PM
To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: Can we have the draft Order and Summary of findings please??

When shall we expect it?

Rakesh

From: Drake, Christopher
To: Batra, Rakesh; Rosenbaum, Matthew
Cc: Konieczny, Katherine
Subject: RE: Tomorrow's 202(c) Order
Date: Monday, March 12, 2018 11:42:30 AM

Rakesh & Matt -

(b) (5)

-----Original Message-----

From: Drake, Christopher
Sent: Monday, March 12, 2018 11:27 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Tomorrow's 202(c) Order

OK. Thanks for the update. (b) (5)

-----Original Message-----

From: Batra, Rakesh
Sent: Monday, March 12, 2018 11:25 AM
To: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Cc: Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: Tomorrow's 202(c) Order

It's on its way to S2.

-----Original Message-----

From: Drake, Christopher
Sent: Monday, March 12, 2018 11:23 AM
To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>
Cc: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Subject: Tomorrow's 202(c) Order

Rakesh & Matt,

(b) (5)

Please let us know if you need anything further from us to ensure that the deadline is met.

Thanks,
Chris

Chris Drake
Attorney-Adviser
U.S. Department of Energy, Office of General Counsel
Office of Electricity & Fossil Energy (GC-76)
Forrestal North, Room 6B-256
Tel. 202.586.2919
Christopher.Drake@hq.doe.gov

From: [Drake, Christopher](#)
To: [Fickel, Louise](#); [Batra, Rakesh](#); [Minnick, Debra B. \(CONTR\)](#); [Mills, Brian](#); [Rosenbaum, Matthew](#); [Jereza, Catherine](#); [Konieczny, Katherine](#)
Subject: RE: 202C (2018-001014)
Date: Tuesday, March 13, 2018 5:31:41 PM

Excellent – thank you, Louise!

From: Fickel, Louise

Sent: Tuesday, March 13, 2018 5:31 PM

To: Batra, Rakesh ; Minnick, Debra B. (CONTR) ; Mills, Brian ; Rosenbaum, Matthew ; Jereza, Catherine ; Konieczny, Katherine ; Drake, Christopher

Subject: RE: 202C (2018-001014)

The new Order and the CX are both now on the website and should be live shortly.

From: Fickel, Louise

Sent: Tuesday, March 13, 2018 3:50 PM

To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Minnick, Debra B. (CONTR) <Debra.Minnick@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>

Subject: RE: 202C (2018-001014)

Thanks, Rakesh. I'll let everyone know once these have been posted.

Louise

From: Batra, Rakesh

Sent: Tuesday, March 13, 2018 3:34 PM

To: Fickel, Louise <Louise.Fickel@Hq.Doe.Gov>; Minnick, Debra B. (CONTR) <Debra.Minnick@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher <Christopher.Drake@hq.doe.gov>

Subject: FW: 202C (2018-001014)

Please post this CX, along with the Order.

Thanks

From: Mills, Brian

Sent: Tuesday, March 13, 2018 3:17 PM

To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Cc: Le Duc, Edward <Edward.LeDuc@hq.doe.gov>

Subject: RE: 202C (2018-001014)

From: Batra, Rakesh

Sent: Tuesday, March 13, 2018 3:07 PM

To: Mills, Brian <Brian.Mills@hq.doe.gov>

Subject: FW: 202C (2018-001014)

FYI

From: Pitcher, Lisa

Sent: Tuesday, March 13, 2018 3:00 PM

To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Minnick, Debra B. (CONTR) <Debra.Minnick@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Cc: Blake-Kennerly, Shena <Shena.Kennerly@hq.doe.gov>; Bowie, America <America.Bowie@hq.doe.gov>

Subject: RE: 202C (2018-001014)

OE

Please see the attached approval.

Thanks

Lisa

From: Bittner, Kathy (CONTR)

Sent: Monday, March 12, 2018 2:29 PM

To: Bowie, America <America.Bowie@hq.doe.gov>

Cc: Pitcher, Lisa <Lisa.Pitcher@hq.doe.gov>; Blake-Kennerly, Shena <Shena.Kennerly@hq.doe.gov>; Minnick, Debra B. (CONTR) <Debra.Minnick@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: RE: 202C (2018-001014)

Importance: High

America,

(b) (6)

As with previous packages, would you please email the signed Order to Debra, Katie, Rakesh, Matt and myself? Rakesh or Katie will email it to the appropriate parties.

Please let me know if you have any questions.

Thanks,

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Bowie, America

Sent: Monday, March 12, 2018 10:39 AM

To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>

Subject: 202C

It's on its way to S2.

From: Michael Regulinski
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Robinson, Evelyn; Pincus, Steven; "Burlew, James M."; "Mars, Jennifer A."; casey.roberts@sierracub.org; sanjay.narayan@sierracub.org; Mike Barner; Mohammed Alfayyumi
Subject: DOE Order 202-18-3 Report
Date: Friday, March 16, 2018 2:57:10 PM
Attachments: DOE report Yorktown trans outages 3 16 2018.pdf
PUBLIC Skiffes Creek outages table 031218 tdb emissions MCR Redacted.pdf
CONFIDENTIAL CEII Skiffes Creek outages.zip

Confidential Contains CEII Material

Dear Secretary Perry:

PJM Interconnection, LLC and Virginia Electric and Power Company, dba Dominion Energy Virginia, respectfully submit the following in compliance with Order No. 202-18-3:

1. Report on Yorktown Units 1 and 2 Revised Construction Schedule;
2. Public version of Skiffes Creek outages table (CEII material redacted); and
3. Non-Public version of Skiffes Creek outages table (password protected contains CEII material).

Please contact me if you have any questions.

I will send the password for the CEII file by separate email to Dominion, PJM and DOE personnel only.

Thanks,

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794

P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

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March 16, 2017

The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: Report on Yorktown Units 1 and 2 Revised Outage Schedule - Order No. 202-18-3

Dear Secretary Perry:

Pursuant to Order No. 202-18-3 (the "Renewal Order") issued March 13, 2018, by the Secretary of Energy ("Secretary"), PJM Interconnection, L.L.C. ("PJM") and Virginia Electric and Power Company ("Dominion Energy Virginia") respectfully submit the attached Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of March 12, 2018 ("March 2018 Outage Schedule"). This submission is in accordance with the Secretary's directive that PJM and Dominion Energy Virginia provide updated outage schedules and associated Yorktown Units 1 and 2 emission estimates in the event the schedule or emission estimates change from those presented in the PJM Renewal Application Filing dated February 20, 2018 ("Renewal Application") within two weeks of the change.¹

In the Renewal Application, PJM explained that construction of the Skiffes Creek Transmission Project began in July 10 2017 and was expected to take approximately 18-20 months.² As reported on October 12, 2017, the Skiffs Creek Transmission Project was scheduled to be completed May 12, 2019.³ The October 2017 Outage Schedule included a Skiffes Creek construction schedule and planned transmission outage sequence, and Yorktown run and emission estimates. The schedule also provided actual emissions from the Yorktown unit runs as directed by PJM, the current estimated planned

¹ Renewal Order at 2.

² Renewal Application at 6-7.

³ Report on Yorktown Units 1 and 2 Revised Construction Schedule ("October 2017 Outage Schedule").

transmission outage time frames, transmission limiting contingencies, Dominion Zone load thresholds which trigger the need to operate Yorktown Units 1 and/or 2, estimated run time in days, and Dominion Energy Virginia's estimated emissions based on the run time estimates. The Renewal Application explained that PJM and Dominion Energy Virginia would provide DOE with revised construction schedules and estimated emissions.⁴

In the Renewal Order, the DOE determined that an emergency exists due to the shortage of electric energy and the shortage of facilities for the generation and transmission of electric energy.⁵ The Secretary found the issuance of the Renewal Order is necessary to address the emergency and serve the public interest in the North Hampton Roads area.⁶ The Renewal Order also directed PJM and Dominion Energy Virginia to provide an updated outage schedule and associated Yorktown Units 1 and 2 emission estimates in the event the outage schedule or emission estimates change from those presented in the PJM Renewal Application within two weeks of the change.⁷

The attached March 2018 Outage Schedule includes a revised construction schedule and planned transmission outage sequence, and Yorktown run and emission estimates. The March 2018 Outage Schedule extends the October 2017 Outage Schedule by 3 days (from May 12, 2019 to May 15, 2019) for the planned transmission outages associated with Skiffes Creek transmission project that may require Yorktown 1 & 2 units to run. The revised schedule also adds an estimated additional 28 run days for the dispatch of the Yorktown units for reliability. The Skiffes Creek transmission project is currently estimated to be complete by August 21, 2019, but under the revised schedule PJM is not expected to dispatch the units after May 15, 2019.

The planned transmission outages are coordinated between PJM and Dominion Energy Virginia to ensure the reliability of service in the area and to support the Skiffes Creek construction schedule. After numerous consultations between PJM and Dominion Energy Virginia, the construction schedule,

⁴ Renewal Application at 7, footnote 18.

⁵ Renewal Order at 1.

⁶ Renewal Order at 1.

⁷ Renewal Order at 2.

the transmission outage schedule, and the estimated run days were revised due to complications encountered in the construction of the Skiffes Creek transmission project. A one month delay to the Skiffes Creek construction schedule was initially proposed due to a manufacturer's defect in the Y Clevis which holds the wire to the insulator used on the line rebuild sections. A failure of the Y Clevis could result in the wire dropping from the transmission tower. With the manufacturer's help Dominion Energy Virginia identified the defect parts and replaced them, however the work required climbing each structure and replacing this part on all three phases. Also, several additional transmission towers will need to be replaced that were not in the original plan due to deterioration found in the field. These additional construction delays pushed the outages of the 292 and 285 lines to peak loading periods which created operational concerns. Therefore, PJM and Dominion Energy Virginia agreed to rearrange the construction schedule and the outage schedule to minimize the impact of transmission outages of the 285 line during the 2018 summer peak and the 2019 winter peak periods. This resulted in an estimated additional 28 run days for the dispatch of the Yorktown units for reliability and rearranging certain transmission outages. While under the revised schedule PJM is not expected to dispatch the units after May 15, 2019, construction of the Skiffes Creek transmission project has been extended and is currently estimated to be complete by August 21, 2019.

The March 2018 Outage Schedule provides actual emissions from the July 2017, August 2017, and January 2018 Yorktown unit runs. The schedule also shows the current estimated planned transmission outage time frames, transmission limiting contingencies, Dominion Zone load thresholds which trigger the need to operate Yorktown Units 1 and/or 2, estimated run time in days, and Dominion Energy Virginia's estimated emissions for the remainder of the schedule based on the run time estimates.

The construction schedule may change again. PJM and Dominion Energy Virginia will provide an updated outage schedule and associated Yorktown Units 1 and 2 emission estimates in the event the outage schedule or emission estimates changes as directed by the Renewal Order.

REQUEST FOR CEI DESIGNATION

The filing includes the following attachments:

1. Non Public version of Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of March 12, 2018 (password protected containing Critical Energy Infrastructure (“CEII”) material); and

2. Public version of Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of March 12, 2018 (public version with CEII material redacted).

In regard to the Non Public version, PJM and Dominion Energy Virginia respectfully requests the transmission outage and limited contingency information submitted to the DOE be designated as CEII pursuant Federal Power Act (“FPA”) Section 215A(d) and the implementing regulations, 18 C.F.R. Section 388.113.

In Fixing America's Surface Transportation Act (“FAST”) Section 215A(a)(3), CEII is specifically defined as information “designated as critical electric infrastructure information by ... the Secretary of the Department of Energy pursuant to subsection (d).”⁸ Under FPA Section 215A(a)(3), CEII includes information that is submitted to the DOE, and designated as such by DOE.⁹ The regulations define CEII in pertinent part as follows:

“1) Critical electric infrastructure information means information related to critical electric infrastructure ... Provided to the Commission or other Federal agency ... that is designated as critical electric infrastructure information by the Commission or the Secretary of the Department of Energy pursuant to section 215A(d) of the Federal Power Act. Such term includes information that qualifies as critical energy infrastructure information under the Commission's regulations. Critical Electric Infrastructure Information is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. 552(b)(3) and shall not be made available by any Federal, State, political subdivision or tribal authority pursuant to any Federal, State, political subdivision or tribal law requiring public disclosure of information or records pursuant to section 215A(d)(1)(A) and (B) of the Federal Power Act.”

2) Critical energy infrastructure information means specific engineering, vulnerability, or detailed design information about ... existing critical infrastructure that:
(i) Relates details about the production, generation, transportation, transmission, or distribution of energy;
(ii) Could be useful to a person in planning an attack on critical infrastructure;
(iii) Is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. 552; and

⁸ FAST Act, Pub. L. No. 114-94, section 61,003, 129 Stat. 1312, 1776.

⁹ FAST Act, Pub. L. No. 114-94, section 61,003, 129 Stat. 1312, 1773 (“critical electric infrastructure information means information ... generated by or provided to the Commission or other Federal agency ... that is designated as critical electric infrastructure information by the Commission or the Secretary pursuant to subsection (d)”).

(iv) Does not simply give the general location of the critical infrastructure.”¹⁰

PJM and Dominion Energy Virginia submits the redacted information is CEII because it provides details about the production, generation and transportation of energy, which if publically available could be useful in planning an attack on critical infrastructure in the North Hampton Road area of the Commonwealth of Virginia, namely the electric transmission system.

Respectfully submitted,

/s/ Michael C. Regulinski

Michael C. Regulinski
Managing General Counsel
Dominion Energy Services, Inc.
120 Tredegar Street, RS-2
Richmond, Virginia 23219
Phone: (804) 819-2794
Email: michael.regulinski@dominionenergy.com

Craig Glazer
VP, Federal Government Policy
PJM Interconnection, L.L.C.

Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.
955 Jefferson Avenue
Valley Forge Corporate Center
Norristown, PA 19403-2497
Phone: 610-666-4370
Email: pincus@pjm.com

cc: Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Katherine Konieczny, U.S. Department of Energy
Sanjay Narayan, Sierra Club Environmental Law Program (Public Version of Outage Schedule)

¹⁰ 18 C.F.R. Section 388.113(c)(1) and (2).

From: Michael Regulinski
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Robinson, Evelyn; Pincus, Steven; Burlew, James M.; Mars, Jennifer A.; Mike Barmer; Mohammed Alfayyumi
Subject: RE: DOE Order 202-18-3 Report
Date: Friday, March 16, 2018 2:58:22 PM

The password for the CEII file is: (b) (6)

Best, Mike

Michael C. Regulinski
 Managing General Counsel
 Dominion Energy Services, Inc.
 tieline: 738-2794
 P: (804) 819-2794
 C: (b) (6)
michael.regulinski@dominionenergy.com

From: Michael Regulinski (Services - 6)
Sent: Friday, March 16, 2018 2:56 PM
To: 'The.Secretary@hq.doe.gov'; 'Hoffman, Patricia'; 'Catherine.Jereza@HQ.DOE.GOV'; 'Batra, Rakesh'; 'Katherine.Konieczny@HQ.DOE.GOV'
Cc: 'Bryson, Mike E.'; 'Souder, David W.'; 'Tam, Simon K.'; 'Glazer, Craig'; 'O'Hara, Chris'; 'Robinson, Evelyn'; 'Pincus, Steven'; 'Burlew, James M.'; 'Mars, Jennifer A.'; 'casey.roberts@sierraclub.org'; 'sanjay.narayan@sierraclub.org'; Mike Barmer (PowerDelivery - 1T); Mohammed Alfayyumi (PowerDelivery - 1T) (mohammed.alfayyumi@dominionenergy.com)
Subject: DOE Order 202-18-3 Report

Confidential Contains CEII Material

Dear Secretary Perry:

PJM Interconnection, LLC and Virginia Electric and Power Company, dba Dominion Energy Virginia, respectfully submit the following in compliance with Order No. 202-18-3:

1. Report on Yorktown Units 1 and 2 Revised Construction Schedule;
2. Public version of Skiffes Creek outages table (CEII material redacted); and
3. Non-Public version of Skiffes Creek outages table (password protected contains CEII material).

Please contact me if you have any questions.

I will send the password for the CEII file by separate email to Dominion, PJM and DOE personnel only.

Thanks,

Michael C. Regulinski
 Managing General Counsel
 Dominion Energy Services, Inc.
 tieline: 738-2794
 P: (804) 819-2794
 C: (b) (6)
michael.regulinski@dominionenergy.com

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From: Michael Regulinski
To: [Batra, Rakesh](#)
Subject: RE: DOE Order 202-18-3 Report
Date: Friday, March 16, 2018 3:40:20 PM
Attachments: [CEII Skiffes Creek outages table 031218.pdf](#)

Michael C. Regulinski
 Managing General Counsel
 Dominion Energy Services, Inc.
 tieline: 738-2794
 P: (804) 819-2794
 C: (b) (6)
michael.regulinski@dominionenergy.com

From: Batra, Rakesh [<mailto:Rakesh.Batra@Hq.Doe.Gov>]
Sent: Friday, March 16, 2018 3:36 PM
To: Michael Regulinski (Services - 6); Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Konieczny, Katherine
Cc: Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Robinson, Evelyn; Pincus, Steven; 'Burlew, James M.'; 'Mars, Jennifer A.'; casey.roberts@sierraclub.org; sanjay.narayan@sierraclub.org; Mike Barmer (PowerDelivery - 1T); Mohammed Alfayyumi (PowerDelivery - 1T)
Subject: [External] RE: DOE Order 202-18-3 Report
 I am unable to extract the .zip attachment. Please resend as a password protected pdf.
 Thanks,
 Rakesh

From: Michael Regulinski [<mailto:michael.regulinski@dominionenergy.com>]
Sent: Friday, March 16, 2018 2:56 PM
To: Secretary Perry <The.Secretary@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>
Cc: Bryson, Mike E. <Michael.Bryson@pjm.com>; Souder, David W. <David.Souder@pjm.com>; Tam, Simon K. <Simon.Tam@pjm.com>; Glazer, Craig <Craig.Glazer@pjm.com>; O'Hara, Chris <Chris.OHara@pjm.com>; Robinson, Evelyn <Evelyn.Robinson@pjm.com>; Pincus, Steven <Steven.Pincus@pjm.com>; 'Burlew, James M.' <James.Burlew@pjm.com>; 'Mars, Jennifer A.' <Jennifer.Mars@pjm.com>; casey.roberts@sierraclub.org; sanjay.narayan@sierraclub.org; Mike Barmer <mike.barmer@dominionenergy.com>; Mohammed Alfayyumi <mohammed.alfayyumi@dominionenergy.com>
Subject: DOE Order 202-18-3 Report

Confidential Contains CEII Material

Dear Secretary Perry:

PJM Interconnection, LLC and Virginia Electric and Power Company, dba Dominion Energy Virginia, respectfully submit the following in compliance with Order No. 202-18-3:

1. Report on Yorktown Units 1 and 2 Revised Construction Schedule;
2. Public version of Skiffes Creek outages table (CEII material redacted); and
3. Non-Public version of Skiffes Creek outages table (password protected contains CEII

material).

Please contact me if you have any questions.

I will send the password for the CEII file by separate email to Dominion, PJM and DOE personnel only.

Thanks,

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794

P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

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NON-PUBLIC CONFIDENTIAL – CEII

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of March 12, 2018 (subject to change)

Outage	Outage Time Frame	Limiting Contingency	Load Threshold	Hours over Load Threshold**	Days over load threshold**	Dominion Emissions Estimates
(b) (3) (A)	7/9/17-9/29/17	(b) (3) (A)	>18,400 MW	87	18	NOx 243.06 SO2 933.11 PM10 52.62 CO2 122385.6 Pb 0.01 Hg 0.0015 HCl 22.01 HF 3.56 CO 11.88
(b) (3) (A)	9/29/17-10/27/17	(b) (3) (A)	>17,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	10/27/17-10/30/17	(b) (3) (A)	1 unit > 12,000 MW, 2 units > 14,000 MW	0 0	0 0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	10/30/17-3/22/18	(b) (3) (A)	>17,200 MW	20	6	NOx 81.02 SO2 311.04 PM10 17.54 CO2 40795.2 Pb 0.0033 Hg 0.0005 HCl 7.34 HF 1.19 CO 3.96

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Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of March 12, 2018 (subject to change)

(b) (3) (A)	3/25/18-6/15/18	(b) (3) (A)	>18,100 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	3/25/18-6/15/18	(b) (3) (A)	1 unit > 12,000 MW, 2 units > 14,000 MW	242 87	26 15	NOx 553.64 SO2 2125.42 PM10 119.85 CO2 278767.2 Pb 0.0227 Hg 0.0035 HCl 50.13 HF 8.12 CO 27.06
(b) (3) (A)	9/4/18-11/30/18	(b) (3) (A)	>13,000 MW	172	22	NOx 297.07 SO2 1140.47 PM10 64.31 CO2 149582.4 Pb 0.0122 Hg 0.0019 HCl 26.90 HF 4.36 CO 14.52
(b) (3) (A)	9/4/18-11/30/18	(b) (3) (A)	>18,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	12/01/18-12/31/18, 2/15/19-4/15/19	(b) (3) (A)	1 unit > 14,400 MW, 2 units > 16,400 MW	73 13	11 3	NOx 189.05 SO2 725.75 PM10 40.92 CO2 95188.8 Pb 0.0078 Hg 0.0012 HCl 17.12 HF 2.77 CO 9.24

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Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of March 12, 2018 (subject to change)

(b) (3) (A)	12/01/18-12/31/18, 2/15/19-4/15/19	(b) (3) (A)	>18,100 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	4/9/19-4/15/19	(b) (3) (A)	1 unit > 12,000 MW, 2 units > 14,000 MW	0 0	0 0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	4/9/19-4/15/19	(b) (3) (A)	>18,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	3/28/19-4/1/19	(b) (3) (A)		0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
(b) (3) (A)	5/11/19-5/15/19	(b) (3) (A)		0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0

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Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of March 12, 2018 (subject to change)

(b) (3) (A)	6/16/18-9/3/18, 1/1/19-2/14/19	(b) (3) (A)	>18,400 MW	66	16	NOx 216.05 SO2 829.43 PM10 46.77 CO2 108787.2 Pb 0.0089 Hg 0.0014 HCl 19.56 HF 3.17 CO 10.56
			Total Estimate	760	117	NOx 1579.89 SO2 6065.22 PM10 342.01 CO2 795506.4 Pb 0.0649 Hg 0.0099 HCl 143.05 HF 23.17 CO 77.23

Planned transmission outages associated with Skiffes Creek transmission project that may require Yorktown 1 & 2 units to run scheduled to be completed on May 15, 2019. Skiffes Creek transmission project construction schedule is estimated to be complete by August 21, 2019.

** Estimates are for both Yorktown 1 & 2 units.

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Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of March 12, 2018 (subject to change)

		07-2017	08-2017	09-2017	10-2017	11-2017	12-2017	01-2018	02-2018	03-2018	04-2018	05-2018	06-2018	07-2018	08-2018	09-2018	10-2018	11-2018
Days over load threshold **		9	9	0	0	0	1	4	1	2	2	11	26	7	8	16	2	4
Hours over Load Threshold **		39	48	0	0	0	3	13	4	6	8	95	220	30	34	145	13	14
Dominion Emission Estimates (tons)	NOx	107.7	6.0	0.0	0.0	0.0	0.0	44.4	0.0	27.01	27.01	148.54	351.09	94.52	108.03	216.05	27.01	54.01
	SO2	416.9	20.8	0.0	0.0	0.0	0.0	157.6	0.0	103.68	103.68	570.23	1347.83	362.88	414.72	829.43	103.68	207.36
	PM10	12.83	14.9	0.0	0.003	0.0	0.0	10.97	0.0	5.85	5.85	32.15	76.00	20.46	23.39	46.77	5.85	11.69
	CO2	49,417.3	2,744.1	0.0	5.8	0.0	0.0	19,702.3	0.0	13,598.4	13,598.4	74,791.2	76,779.2	7,594.4	4,393.6	108,787.2	13,598.4	27,196.8
	Pb	0.0046	0.00028	0.0	0.0	0.0	0.0	0.000272	0.0	0.0011	0.0011	0.0061	0.0144	0.0039	0.0044	0.0089	0.0011	0.0022
	Hg	0.000897	0.0000546	0.0	0.0	0.0	0.0	0.000318	0.0	0.0002	0.0002	0.0009	0.0022	0.0006	0.0007	0.0014	0.0002	0.0003
	HCl	12.92	0.79	0.0	0.0	0.0	0.0	4.59	0.0	2.45	2.45	13.45	31.79	8.56	9.78	19.56	2.45	4.89
	HF	1.62	0.10	0.0	0.0	0.0	0.0	0.57	0.0	0.40	0.40	2.18	5.15	1.39	1.58	3.17	0.40	0.79
	CO	5.64	0.36	0.0	0.0	0.0	0.0	1.9	0.0	1.32	1.32	7.26	17.16	4.62	5.28	10.56	1.32	2.64

Figures highlighted in green are actual emission data for the month

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Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of March 12, 2018 (subject to change)

		12-2018	01-2019	02-2019	03-2019	04-2019	05-2019
Days over load threshold **		10	1	4	0	0	0
Hours over Load Threshold **		59	2	27	0	0	0
Dominion Emission Estimates (tons)	NOx	135.03	13.50	54.01	0.0	0.0	0.0
	SO2	518.39	51.84	207.36	0.0	0.0	0.0
	PM10	29.23	2.92	11.69	0.0	0.0	0.0
	CO2	67,992.0	6,799.2	27,196.8	-	-	-
	Pb	0.0055	0.0006	0.0022	0.0	0.0	0.0
	Hg	0.0008	0.0001	0.0003	0.0	0.0	0.0
	HCl	12.23	1.22	4.89	0.0	0.0	0.0
	HF	1.98	0.20	0.79	0.0	0.0	0.0
	CO	6.60	0.66	2.64	0.0	0.0	0.0

From: Michael Regulinski
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Robinson, Evelyn; Pincus, Steven; "Burlew, James M."; "Mars, Jennifer A."; casey.roberts@sierraclub.org; sanjay.narayan@sierraclub.org; Mike Barner; Mohammed Alfayyumi; "kfinto@hunton.com"
Subject: Yorktown Units Test Run Report: DOE Order 202-18-3
Date: Wednesday, April 25, 2018 3:43:43 PM
Attachments: DOE Report April Yorktown Run April 11 test run.pdf
Yorktown Bi-Weekly Hourly Emissions Data.pdf
YT12 Intake Circulating Water Usage.pdf

Dear Secretary Perry:

PJM Interconnection, LLC and Virginia Electric and Power Company, dba Dominion Energy Virginia, respectfully submit the following in compliance with Order No. 202-18-3:

1. Report on Yorktown Units 1 and 2 Test Run.

Please contact me if you have any questions.

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

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April 25, 2018

The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-18-3

Dear Secretary Perry:

Pursuant to Order No. 202-18-3 (the "Order") issued March 13, 2018 by the Secretary of Energy ("Secretary"), PJM Interconnection, L.L.C. ("PJM") and Virginia Electric and Power Company ("Dominion Energy Virginia") respectfully submits the attached report regarding a test run of Yorktown Units 1 and 2 on April 11, 2018 in accordance with the Secretary's directive to "report all dates on which Yorktown Units 1 and 2 are operated as well as the estimated emissions and water usage data associated with their operations."¹

In the PJM application submitted June 13, 2017 (incorporated by reference in the PJM February 28 Renewal Application), PJM explained that emissions from the plant would occur at times outside of periods where PJM dispatches the Yorktown units for reliability.² These times include basic and periodic maintenance activities, and compliance related activities, undertaken to ensure the units remain reliable and capable of operating when necessary. These activities are consistent with normal operating procedures and good engineering practices, and include operating equipment for maintenance testing and reliability check out, testing of fuel systems, tuning of units, required emissions or operational testing, and

¹ Order at page 2. The Order is for the period March 14 to June 11, and directs the emission report to be submitted every two weeks. April 25 is the end of the third two week period.

² PJM Application at page 13, incorporated by reference in the February 28 PJM Renewal Application at page 1.

other operating procedures. Without performing these activities Dominion Energy Virginia may not be prepared to run the Yorktown Units when directed by PJM to ensure system reliability.

On April 11, for approximately 7 hours, Dominion Energy Virginia tested equipment on the Yorktown Units as part of an effort to ensure reliability of these two units when called upon by PJM to provide grid stability. This testing included running sub-systems and firing of ignitors and warm up burners to functionally test and verify operation for start-up. Dominion Energy Virginia did not fire the boiler for any extended period but just long enough to cycle through all the ignitors and warm up the burners. Dominion Energy Virginia tests each unit individually; the first run was the unit 1 reliability test and the second run was the unit 2 reliability test run. The two tests differed in duration due to troubleshooting of equipment issues for the start-up as well as working through some opacity issues that is commonplace when a boiler sits for a period of time and ash settles in the ductwork. The Yorktown generators did not generate any power transmitted to the grid during the test.

Dominion Energy Virginia plans for testing the units depends on whether PJM dispatches the units and they operate. If PJM dispatches the units and they run, Dominion Energy Virginia plans on conducting these tests 2-1/2 to 3 months after the last run.

Attachment 1 to this report is the Yorktown Power Station Bi-weekly Emissions Data for April 3 to April 16 that shows the actual runtime and air emissions data for the period in pounds per hour and total tons for NO_x, SO₂, CO₂, PM₁₀, lead, mercury, HCl, and HF. This spreadsheet includes hourly runtime data for the equipment for the Yorktown units, and raw and calculated data showing emissions data associated with operations of the equipment. Pounds per million Btu and pounds per trillion Btu calculations are not provided with this submittal as these values would not be meaningful for the limited hours of run time observed during this period.

NO_x and SO₂ emissions are based on valid hours of Continuous Emissions Monitoring System (CEMS) data for the period. PM-10 emissions are based on the emission factor derived from the July 21, 2017 stack test (0.0168 lbs/mmBtu corrected to 0.1143 lbs/mmBtu calculated for PM-10 filterable plus condensable). CO₂ emissions are based on valid CEMS hours for the operating period. All other

emissions were calculated using emission factors from AP-42, Fifth Edition, Volume 1, Chapter 1: External Combustion Sources and calculated hourly coal consumption in tons.³

Attachment 2 of this report is entitled "Yorktown Power Station April 11 Circulating Water Usage." This report provides the intake circulating water usage for the test of the Yorktown units.

PJM and Dominion Energy Virginia respectfully submits the information in this report be accepted by the Secretary as compliant with the Order's directives to report all dates on which Yorktown Units 1 and 2 are operated well as the estimated and actual emissions and water usage data associated with their operations.

Respectfully submitted,

/s/ Michael C. Regulinski
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VP, Federal Government Policy
PJM Interconnection, L.L.C.

cc: Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Casey Roberts, Sierra Club Environmental Law Program

³ Mercury and lead emissions were calculated using AP-42, Table 1.1-18. CO emissions were calculated using emission factors from AP-42, Table 1.1-3. Total HAP metals and individual HAP metals are not provided because MATS Table 2 (40 CFR 63, Subpart UUUUU) provides for compliance with either the PM limit or total non-mercury HAP metals limits or individual HAP metals. Dominion Energy Virginia is providing PM-10 emissions for the purposes of MATS. HCl and HF emissions were calculated using emission factors from AP-42, Table 1.1-15.

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
Apr 03, 2018 through Apr 16, 2018

Date & Hour	Unit 1 Load (Gross MW)	Unit 2 Load (Gross MW)	Common Stack										
			Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
04-03-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-03-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-04-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-04-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-04-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-04-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-04-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-04-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-04-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-04-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-04-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-04-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-04-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-04-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
Apr 03, 2018 through Apr 16, 2018

Unit 1 Load Unit 2 Load			Common Stack										
Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
04-06-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-06-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Dominion Energy - Yorktown Power Station
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Date & Hour	Unit 1 Load (Gross MW)	Unit 2 Load (Gross MW)	Common Stack										
			Operation (x.xx Hour)	Heat input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
04-07-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-07-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-08-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

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SUBSTATION Date	Unit 1 Load		Unit 2 Load		Common Stack									
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	04-09-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-09-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-10-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-10-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-10-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-10-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-10-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-10-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-10-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-10-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-10-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-10-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-10-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-10-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

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Bi-Weekly Mass Emissions
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Date	Unit 1 Load (Gross MW)	Unit 2 Load (Gross MW)	Common Stack										HF (Lbs)
			Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	
04-10-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-10-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-10-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-10-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-10-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-10-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-10-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-10-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-10-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-10-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-10-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-10-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 13	0	0	0.92	38.4	0.0	0.0	0.0	0.04	0.105156	2.6E-06	3.04E-06	0.043984	0.005498
04-11-2018 14	0	0	1.00	38.4	0.5	0.0	3.9	1.53	4.38912	0.000109	0.000127	1.835857	0.229482
04-11-2018 15	0	0	1.00	38.4	0.0	0.0	0.0	0.04	0.1143	2.83E-06	3.31E-06	0.047809	0.005976
04-11-2018 16	0	0	1.00	38.4	0.0	0.0	0.0	0.04	0.1143	2.83E-06	3.31E-06	0.047809	0.005976
04-11-2018 17	0	0	1.00	38.4	0.0	0.0	0.0	0.04	0.1143	2.83E-06	3.31E-06	0.047809	0.005976
04-11-2018 18	0	0	1.00	38.4	0.0	0.0	0.0	0.04	0.1143	2.83E-06	3.31E-06	0.047809	0.005976
04-11-2018 19	0	0	0.90	38.4	0.0	0.0	0.0	0.04	0.10287	2.55E-06	2.98E-06	0.043028	0.005378
04-11-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-11-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

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Date & Hour	Unit 1 Load (Gross MW)	Unit 2 Load (Gross MW)	Common Stack										
			Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
04-12-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-12-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
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		Unit 1 Load	Unit 2 Load	Common Stack									
Date & Hour	(Gross MW)	(Gross MW)	Operation	Heat Input	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10	Lead	Mercury	HCl	HF
			(x.xx Hour)	(mmBtu)	(Lbs)	(Lbs)	(Tons)	(Tons)	(Lbs)	(Lbs)	(Lbs)	(Lbs)	(Lbs)
04-13-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-13-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-14-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
Apr 03, 2018 through Apr 16, 2018

Date & Hour	Unit 1 Load (Gross MW)	Unit 2 Load (Gross MW)	Common Stack										
			Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
04-15-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-15-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-16-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-16-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-16-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-16-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-16-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-16-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-16-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-16-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-16-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-16-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-16-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
04-16-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
Apr 03, 2018 through Apr 16, 2018

Substituted Data	Unit 1 Load Unit 2 Load		Common Stack											
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	04-16-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-16-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-16-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-16-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-16-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-16-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-16-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-16-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-16-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-16-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-16-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-16-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	Bi-Weekly Total Tons				44.2	0.5	0.0	3.9	1.76	0.002527	6.26E-08	7.31E-08	0.001057	0.000132
					mmBtu									

Note:

All data are collected and processed in accordance with Part 75.

Data with orange fill are substituted in accordance with Part 75.

Monthly sums may not agree with data published by EPA due to the handling of quarterly and annual totals.

Yorktown Power Station April 11 2018 Circulating Water Usage

Unit	Cooling Water On-Line	Cooling Water Off-Line	Days On-Line	Total Cooling Water Days	Total Water Amount (Mgal)
1	4/11/18 13:53	4/11/18 20:56	0.29	0.29	47

Unit	Cooling Water On-Line	Cooling Water Off-Line	Days On-Line	Total Cooling Water Days	Total Water Amount (Mgal)
2	4/11/18 8:46	4/11/18 20:23	0.48	0.48	69

Total million gallons through Unit 1 & 2

116

From: Michael Regulinski
To: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine
Cc: Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara, Chris; Robinson, Evelyn; Pincus, Steven; "Burlew, James M."; "Mars, Jennifer A."; casey.roberts@sierraclub.org; saniay.narayan@sierraclub.org; Mike Barner; Mohammed Alfayyoumi
Subject: Yorktown Units Operations Report; Order No. 202-18-3
Date: Wednesday, May 09, 2018 4:06:48 PM
Attachments: DOE Report May 2-5 emission data.pdf
Copy of Yorktown Bi-Weekly Hourly Emissions Data 20180423-20180506 (Attachment 1).xlsx
YT12 Intake Circulating Water Usage May 2 5 18.xlsx

Dear Secretary Perry:

PJM Interconnection, LLC and Virginia Electric and Power Company, dba Dominion Energy Virginia, respectfully submit the following in compliance with Order No. 202-18-3: DOE Report Yorktown Units 1 and 2 Operations.

Please contact me if you have any questions.

Michael C. Regulinski
Managing General Counsel

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May 9, 2018

The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-18-3

Dear Secretary Perry:

Pursuant to Order No. 202-18-3 issued on March 13, 2018 (the "Order") by the Secretary of Energy ("Secretary"), PJM Interconnection, L.L.C. ("PJM") and Virginia Electric and Power Company ("Dominion Energy Virginia") respectfully submit the attached air emissions report regarding PJM's dispatch of Yorktown Units 1 and 2 from May 2 through May 5, 2018, including the periods needed to startup and ramp down the units. This report is submitted in accordance with the Secretary's directive that every two weeks PJM and Dominion are to "report all dates between March 13, 2018 and June 11, 2018, on which Yorktown Units 1 and/or 2 are operated, and the associated air emissions and water usage data for those dates."¹

In the Order, the Secretary determined "that an emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation of electric energy." The Secretary found that the issuance of this Order will meet the emergency and serve the public interest as required by Federal Power Act Section 202(c)² In doing so, the Secretary directed Dominion Energy Virginia to operate Yorktown Units 1 and/or 2 as directed by PJM only as needed to ensure grid reliability for a 90-day period March 13, 2018 through June 11, 2018.³

On May 1 at approximately 08 hundred hours, PJM directed Dominion Energy Virginia to have Yorktown Unit 2 available the next day, and Dominion Energy Virginia began the startup process and the unit was on line and generating power on May 2 at 18 hundred hours. On May 2 at approximately 05

¹ Order at page 2.

² Order at page 1.

³ Order at page 2.

hundred hours, PJM directed Dominion Energy Virginia to have Yorktown Unit 1 available the next day, and Dominion Energy Virginia began the startup process and Unit 1 was on line and generating power on May 3 at 15 hundred hours. PJM dispatched both units off line at approximately 00 hundred hours on May 5, and Dominion Energy Virginia took the units offline at about 02 hundred hours on May 5.

Attachment 1 to this report is the Yorktown Power Station Bi-Weekly Mass Emissions for April 23 through May 6 that shows the actual runtime and air emissions data. This spreadsheet includes hourly runtime data for Yorktown Unit 2, hourly gross Megawatt (MW) outputs, and raw and calculated data showing air emissions data associated with operations of Yorktown Unit 2.⁴

The information in Attachment 1 reports Yorktown Unit 2 hourly emissions of PM-10 and SO₂ in pounds per hour and pounds per million BTU, and mercury in pounds per hour and pounds per trillion BTU (Mercury and Air Toxics Standards (MATS) format) for the operating period beginning December 6, 2017 through January 8, 2018. Additionally, Attachment 1 provides Unit 2 hourly emissions of NO_x in pounds per hour, greenhouse gases (as CO₂) in tons per hour, lead in pounds per hour, HCl in pounds per hour, HF in pounds per hour, and CO in pounds per hour. NO_x and SO₂ emissions are based on valid hours of Continuous Emissions Monitoring System (CEMS) data for the period. PM-10 emissions are based on the emission factor derived from the July 21, 2017 stack test (0.0168 lbs/mmBtu corrected to 0.1143 lbs/mmBtu calculated for PM-10 filterable plus condensable). CO₂ emissions are based on valid CEMS hours for the operating period. All other emissions were calculated using emission factors from AP-42, Fifth Edition, Volume 1, Chapter 1: External Combustion Sources and calculated hourly coal consumption in tons.⁵

⁴ The Yorktown units can emit pollution while not generating MWs (*e.g.* during standby, startup and shutdown sequences). Thus, Attachment 1 shows the MW output during the period Yorktown Units 1 and 2 provided power to the grid including startup and shutdown processes and it shows the emissions data for operations of the Units including times when the unit was not generating power.

⁵ Mercury and lead emissions were calculated using AP-42, Table 1.1-18. CO emissions were calculated using emission factors from AP-42, Table 1.1-3. Total HAP metals and individual HAP metals are not provided because MATS Table 2 (40 CFR 63, Subpart UUUUU) provides for compliance with either the PM limit or total non-mercury HAP metals limits or individual HAP metals. Dominion Energy Virginia is providing PM-10 emissions for the purposes of MATS. HCl and HF emissions were calculated using emission factors from AP-42, Table 1.1-15.

Attachment 2 to this report is the Yorktown May 2-5 Circulating Water Usage report for the Yorktown Units 1 and 2 operations required by the Order. Operation of cooling water pumps extends over a period of time longer than unit operation to facilitate cooling of plant components that support the boiler and turbine. As a general rule cooling water will continue to be pumped until the turbine metal temperature is less than 300 °F. However, sometimes additional cooling water is necessary to complete proper cool down of auxiliary equipment and lubrication fluids after the turbine metal reaches 300 °F, as was the case with the Yorktown Units 1 and 2 operations in May. As shown in Attachment 2, water continued to be circulated through Unit 1 until approximately 21 hundred hours on May 6, and until approximately 15 hundred hours on May 8 for Unit 2.

PJM and Dominion Energy Virginia respectfully submits the information in this report be accepted by the Secretary as compliant with the Order's directives to report all dates on which Yorktown Units 1 and/or 2 are operated between March 13 and June 11, 2018 as well as the associated air emissions and water usage associated with their operations.

Respectfully submitted,

/s/Michael C. Regulinski

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cc: Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Casey Roberts, Sierra Club Environmental Law Program

Attachment 1 Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
Apr 23, 2018 through May 06, 2018

Substituted Data	Unit 1 Load Unit 2 Load		Common Stack											
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	04-23-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-23-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Attachment 1 Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
Apr 23, 2018 through May 06, 2018

Substation Data	Unit 1 Load Unit 2 Load		Common Stack											
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	04-24-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-24-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-25-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Attachment 1 Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
Apr 23, 2018 through May 06, 2018

Substation Data	Unit 1 Load Unit 2 Load		Common Stack											
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	04-26-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-26-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Attachment 1 Dominion Energy - Yorktown Power Station

Bi-Weekly Mass Emissions

Apr 23, 2018 through May 06, 2018

Substituted Data	Unit 1 Load Unit 2 Load		Common Stack											
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	04-27-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-27-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-28-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Attachment 1 Dominion Energy - Yorktown Power Station

Bi-Weekly Mass Emissions

Apr 23, 2018 through May 06, 2018

Substituted Data	Unit 1 Load Unit 2 Load			Common Stack										
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	04-29-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-29-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Attachment 1 Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
Apr 23, 2018 through May 06, 2018

Submitted Date	Unit 1 Load Unit 2 Load		Common Stack											
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	04-30-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	04-30-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-01-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
TRUE	05-01-2018 19	0	0	0.42	0.4	0.0	0.0	0.0	0.02	0.048006	1.19E-06	1.39E-06	0.02008	0.00251
	05-01-2018 20	0	0	1.00	46.9	0.8	0.9	4.8	1.87	5.36067	0.000133	0.000155	2.242231	0.280279
	05-01-2018 21	0	0	1.00	58.5	1.3	3.5	6.0	2.33	6.68655	0.000166	0.000193	2.796813	0.349602
	05-01-2018 22	0	0	1.00	107.3	4.3	6.9	11.0	4.27	12.26439	0.000304	0.000355	5.12988	0.641235
	05-01-2018 23	0	0	1.00	148.8	7.9	8.3	15.3	5.93	17.00784	0.000421	0.000492	7.113944	0.889243

Attachment 1 Dominion Energy - Yorktown Power Station
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Apr 23, 2018 through May 06, 2018

Substituted Data	Unit 1 Load		Unit 2 Load		Common Stack									
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	05-02-2018 00	0	0	1.00	224.5	9.2	4.8	23.0	8.94	25.66035	0.000635	0.000742	10.73307	1.341633
	05-02-2018 01	0	0	1.00	173.1	7.6	4.3	17.8	6.90	19.78533	0.00049	0.000572	8.275697	1.034462
TRUE	05-02-2018 02	0	0	1.00	186.6	13.2	6.2	19.1	7.43	21.32838	0.000528	0.000617	8.921116	1.115139
TRUE	05-02-2018 03	0	0	1.00	191.2	13.6	6.3	19.6	7.62	21.85416	0.000541	0.000632	9.141036	1.142629
	05-02-2018 04	0	0	1.00	182.1	7.5	7.7	18.7	7.25	20.81403	0.000515	0.000602	8.705976	1.088247
TRUE	05-02-2018 05	0	0	1.00	107.0	7.6	8.0	11.0	4.26	12.2301	0.000303	0.000354	5.115538	0.639442
TRUE	05-02-2018 06	0	0	1.00	107.2	7.6	1.9	11.0	4.27	12.25296	0.000303	0.000354	5.1251	0.640637
TRUE	05-02-2018 07	0	0	1.00	108.4	7.7	1.0	11.1	4.32	12.39012	0.000307	0.000358	5.18247	0.647809
	05-02-2018 08	0	0	1.00	32.1	0.4	1.6	3.3	1.28	3.66903	9.08E-05	0.000106	1.534661	0.191833
	05-02-2018 09	0	0	1.00	63.6	1.1	3.2	6.5	2.53	7.26948	0.00018	0.00021	3.040637	0.38008
	05-02-2018 10	0	0	1.00	63.4	1.1	3.5	6.5	2.53	7.24662	0.000179	0.00021	3.031076	0.378884
	05-02-2018 11	0	0	1.00	84.8	2.4	5.4	8.7	3.38	9.69264	0.00024	0.00028	4.054183	0.506773
	05-02-2018 12	0	0	1.00	105.8	3.5	6.0	10.9	4.22	12.09294	0.000299	0.00035	5.058167	0.632271
	05-02-2018 13	0	0	1.00	123.6	4.7	7.1	12.7	4.92	14.12748	0.00035	0.000409	5.909163	0.738645
	05-02-2018 14	0	0	1.00	115.1	3.7	6.9	11.8	4.59	13.15593	0.000326	0.000381	5.502789	0.687849
	05-02-2018 15	0	0	1.00	131.5	2.5	6.5	13.5	5.24	15.03045	0.000372	0.000435	6.286853	0.785857
	05-02-2018 16	0	0	1.00	106.9	2.1	5.9	11.0	4.26	12.21867	0.000303	0.000353	5.110757	0.638845
	05-02-2018 17	0	0	1.00	124.8	2.6	6.4	12.8	4.97	14.26464	0.000353	0.000413	5.966534	0.745817
	05-02-2018 18	0	12	1.00	249.6	37.9	191.2	25.6	9.94	28.52928	0.000706	0.000825	11.93307	1.491633
	05-02-2018 19	0	58	1.00	621.6	123.7	799.7	63.8	24.76	71.04888	0.001759	0.002055	29.71793	3.714741
	05-02-2018 20	0	92	1.00	878.0	220.4	1272.7	90.1	34.98	100.3554	0.002485	0.002903	41.9761	5.247012
	05-02-2018 21	0	99	1.00	916.0	238.2	1417.9	94.0	36.49	104.6988	0.002592	0.003029	43.79283	5.474104
	05-02-2018 22	0	126	1.00	1151.7	482.6	1975.4	118.2	45.88	131.6393	0.003259	0.003808	55.06135	6.882669
	05-02-2018 23	0	144	1.00	1276.2	562.8	2189.3	130.9	50.84	145.8697	0.003612	0.00422	61.01355	7.626693
	05-03-2018 00	0	145	1.00	1269.3	548.3	2212.4	130.2	50.57	145.081	0.003592	0.004197	60.68367	7.585458
	05-03-2018 01	0	145	1.00	1292.7	521.0	2408.0	132.6	51.50	147.7556	0.003658	0.004275	61.80239	7.725299
	05-03-2018 02	0	145	1.00	1231.3	517.1	2258.8	126.3	49.06	140.7376	0.003485	0.004072	58.86693	7.358367
	05-03-2018 03	0	145	1.00	1267.7	556.5	2209.8	130.1	50.51	144.8981	0.003588	0.004192	60.60717	7.575896
	05-03-2018 04	0	145	1.00	1207.6	537.4	2229.0	123.9	48.11	138.0287	0.003418	0.003993	57.73386	7.216733
	05-03-2018 05	0	145	1.00	1278.3	571.4	2188.4	131.2	50.93	146.1097	0.003618	0.004227	61.11394	7.639243
	05-03-2018 06	0	146	1.00	1284.1	575.3	2184.1	131.8	51.16	146.7726	0.003634	0.004246	61.39124	7.673904
	05-03-2018 07	0	146	1.00	1279.8	578.5	2164.7	131.3	50.99	146.2811	0.003622	0.004232	61.18566	7.648207
	05-03-2018 08	0	146	1.00	1268.7	572.2	2130.3	130.2	50.55	145.0124	0.00359	0.004195	60.65498	7.581873
TRUE	05-03-2018 09	0	145	1.00	1265.4	573.3	2088.1	129.6	50.33	144.4066	0.003575	0.004178	60.40159	7.550199
	05-03-2018 10	0	145	1.00	1265.1	574.4	2098.7	129.8	50.40	144.6009	0.00358	0.004183	60.48287	7.560359
	05-03-2018 11	0	145	1.00	1317.6	596.9	2140.7	135.2	52.49	150.6017	0.003729	0.004357	62.99283	7.874104

Attachment 1 Dominion Energy - Yorktown Power Station

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Apr 23, 2018 through May 06, 2018

Substituted Data	Unit 1 Load		Unit 2 Load	Common Stack										
	Date & Hour	(Gross MW)		Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	05-03-2018 12	0	145	1.00	1343.4	604.5	2142.2	137.8	53.52	153.5506	0.003802	0.004442	64.22629	8.028287
	05-03-2018 13	0	145	1.00	1363.2	628.4	2201.8	139.9	54.31	155.8138	0.003858	0.004508	65.17291	8.146614
TRUE	05-03-2018 14	0	145	1.00	1436.3	725.6	2246.3	147.4	57.24	164.2262	0.004066	0.004751	68.69163	8.586454
	05-03-2018 15	11	145	1.00	1477.5	784.6	2279.7	151.6	58.86	168.8783	0.004181	0.004886	70.63745	8.829681
	05-03-2018 16	53	145	1.00	1830.4	836.5	2988.3	187.8	72.92	209.2147	0.00518	0.006053	87.50916	10.93865
	05-03-2018 17	80	145	1.00	2136.0	862.9	3581.4	219.2	85.10	244.1448	0.006045	0.007063	102.1195	12.76494
	05-03-2018 18	95	145	1.00	2244.0	1000.8	3823.5	230.2	89.40	256.4892	0.006351	0.00742	107.2829	13.41036
	05-03-2018 19	100	145	1.00	2292.1	1061.2	3923.0	235.2	91.32	261.987	0.006487	0.007579	109.5825	13.69781
	05-03-2018 20	100	145	1.00	2297.3	1084.3	3931.8	235.7	91.53	262.5814	0.006501	0.007597	109.8311	13.72888
	05-03-2018 21	100	145	1.00	2277.4	1079.5	3928.7	233.7	90.73	260.3068	0.006445	0.007531	108.8797	13.60996
	05-03-2018 22	100	145	1.00	2303.2	1057.2	3971.0	236.3	91.76	263.2558	0.006518	0.007616	110.1131	13.76414
	05-03-2018 23	100	145	1.00	2305.3	1051.2	3994.4	236.5	91.84	263.4958	0.006524	0.007623	110.2135	13.77669
	05-04-2018 00	100	145	1.00	2343.8	1111.0	4180.4	240.5	93.38	267.8963	0.006633	0.00775	112.0542	14.00677
	05-04-2018 01	109	146	1.00	2447.1	1103.6	4440.9	251.1	97.49	279.7035	0.006925	0.008092	116.9928	14.6241
	05-04-2018 02	115	136	1.00	2401.1	1092.5	4354.2	246.3	95.66	274.4457	0.006795	0.00794	114.7936	14.3492
	05-04-2018 03	116	46	1.00	1691.5	850.8	2838.3	173.5	67.39	193.3385	0.004787	0.005593	80.86853	10.10857
	05-04-2018 04	116	28	1.00	1521.2	774.3	2479.2	156.1	60.61	173.8732	0.004305	0.00503	72.72669	9.090837
	05-04-2018 05	119	39	1.00	1645.7	796.5	2578.0	168.9	65.57	188.1035	0.004657	0.005442	78.67888	9.834861
	05-04-2018 06	119	123	1.00	2304.4	990.9	3757.5	236.4	91.81	263.3929	0.006521	0.00762	110.1705	13.77131
	05-04-2018 07	120	145	1.00	2474.6	1138.3	4003.9	253.9	98.59	282.8468	0.007003	0.008183	118.3076	14.78845
	05-04-2018 08	120	146	1.00	2472.3	1181.8	4179.3	253.7	98.50	282.5839	0.006997	0.008175	118.1976	14.7747
	05-04-2018 09	121	147	1.00	2516.9	1122.5	4375.7	258.2	100.27	287.6817	0.007123	0.008323	120.3299	15.04124
	05-04-2018 10	121	147	1.00	2517.2	1132.7	4383.5	258.3	100.29	287.716	0.007124	0.008324	120.3442	15.04303
	05-04-2018 11	121	146	1.00	2519.6	1151.5	4437.3	258.5	100.38	287.9903	0.00713	0.008332	120.459	15.05737
	05-04-2018 12	121	146	1.00	2509.7	1149.4	4452.7	257.5	99.99	286.8587	0.007102	0.008299	119.9857	14.99821
	05-04-2018 13	121	146	1.00	2508.4	1148.8	4476.1	257.4	99.94	286.7101	0.007099	0.008295	119.9235	14.99044
	05-04-2018 14	121	146	1.00	2504.1	1146.9	4459.2	256.9	99.76	286.2186	0.007087	0.00828	119.7179	14.96474
	05-04-2018 15	121	146	1.00	2503.7	1151.7	4471.4	256.9	99.75	286.1729	0.007085	0.008279	119.6988	14.96235
	05-04-2018 16	121	146	1.00	2499.8	1144.9	4484.4	256.5	99.59	285.7271	0.007074	0.008266	119.5124	14.93904
	05-04-2018 17	121	146	1.00	2505.4	1160.0	4497.2	257.1	99.82	286.3672	0.00709	0.008285	119.7801	14.97251
	05-04-2018 18	121	146	1.00	2507.6	1148.5	4470.0	257.3	99.90	286.6187	0.007097	0.008292	119.8853	14.98566
	05-04-2018 19	121	146	1.00	2510.4	1147.3	4462.2	257.6	100.02	286.9387	0.007104	0.008301	120.0191	15.00239
	05-04-2018 20	121	146	1.00	2517.4	1158.0	4450.8	258.3	100.29	287.7388	0.007124	0.008324	120.3538	15.04422
	05-04-2018 21	121	146	1.00	2520.2	1161.8	4425.5	258.6	100.41	288.0589	0.007132	0.008334	120.4876	15.06096
	05-04-2018 22	121	145	1.00	2520.3	1159.3	4397.2	258.6	100.41	288.0703	0.007132	0.008334	120.4924	15.06155
	05-04-2018 23	80	81	1.00	1554.1	676.0	2464.1	159.5	61.92	177.6336	0.004398	0.005139	74.2996	9.28745

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Substituted Data	Unit 1 Load Unit 2 Load			Common Stack										
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	05-05-2018 00	4	0	0.22	96.8	21.2	109.1	9.9	3.86	11.06927	0.000274	0.00032	4.629992	0.578749
	05-05-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-05-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 02	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 05	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 07	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 08	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 09	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0

Attachment 1 Dominion Energy - Yorktown Power Station
Bi-Weekly Mass Emissions
Apr 23, 2018 through May 06, 2018

Substituted Data	Unit 1 Load Unit 2 Load		Common Stack											
	Date & Hour	(Gross MW)	(Gross MW)	Operation (x.xx Hour)	Heat Input (mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	PM10 (Lbs)	Lead (Lbs)	Mercury (Lbs)	HCl (Lbs)	HF (Lbs)
	05-06-2018 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 21	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	05-06-2018 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
Bi-Weekly Total Tons					102332.3 mmBtu	22.6	85.5	10499.7	4077.0	5.8	0.00014	0.00017	2.4	0.3

Note:

All data are collected and processed in accordance with Part 75.

Data with orange fill are substituted in accordance with Part 75.

Monthly sums may not agree with data published by EPA due to the handling of quarterly and annual totals.

Attachment 2 Yorktown Power Station May 2-5 2018 Circulating Wa

<i>Unit</i>	<i>On-Line</i>	<i>Off-Line</i>	<i>Days On-Line</i>	<i>Start-up Colling Water Pumps</i>	<i>Turbine Metal Temp < 300 deg</i>
1	5/3/18 15:48	5/5/18 1:13	1.39	5/2/18 12:13	5/6/18 21:18

Million gallons of Intake Circulating Water th

<i>Unit</i>	<i>On-Line</i>	<i>Off-Line</i>	<i>Days On-Line</i>	<i>Start-up Cooling Water Pumps</i>	<i>Turbine Metal Temp < 300 deg</i>
2	5/2/18 19:01	5/5/18 1:13	2.26	5/1/18 14:40	5/8/18 15:28

Million gallons of Intake Circulating Water th

Total million gallons through Unit 1

Water Usage

<i>Total Cooling Water Days</i>	<i>Total Water Amount (Mgal)</i>
4.38	555
rough Unit 1	555

<i>Total Cooling Water Days</i>	<i>Total Water Amount (Mgal)</i>
7.03	843
rough Unit 2	843

& 2	1,398
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March 29, 2018

VIA COURIER

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: Request for Emergency Order Pursuant to Federal Power Act Section 202(c)

Dear Secretary Perry:

Pursuant to Section 202(c) of the Federal Power Act ("FPA"),¹ Section 301(b) of the Department of Energy ("DOE") Organization Act,² and certain of the DOE's Rules of Practice and Procedure,³ FirstEnergy Solutions Corp. ("FirstEnergy Solutions"), on behalf of its named subsidiaries ("Applicants"),⁴ respectfully requests that the Secretary of Energy ("Secretary") find that an emergency condition exists in the footprint of the PJM Interconnection, L.L.C. ("PJM") that requires immediate intervention by the Secretary, in the form of a Section 202(c) emergency order directing: (a) certain existing nuclear and coal-fired generators in PJM,⁵ as detailed herein, to enter into contracts and all necessary arrangements with PJM, on a plant-by-plant basis, to generate, deliver, interchange, and transmit electric energy, capacity, and ancillary services as needed to maintain the stability of the electric grid and (b) PJM to promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide to energy markets and the public at large, including fuel security and diversity, as detailed herein.

PJM has done little to prevent this emergency despite the numerous signs for many years that the emergency was coming. Nuclear and coal-fired generators in PJM have been closing at a rapid rate⁶ putting PJM's system resiliency at risk and many more closures have been

¹ 16 U.S.C. § 824a(c).

² 42 U.S.C. § 7151(b).

³ 10 C.F.R. §§ 205.370-205.373.

⁴ The named subsidiaries are: FirstEnergy Generation, LLC, FirstEnergy Nuclear Generation, LLC, FirstEnergy Nuclear Operating Company, and FirstEnergy Generation Mansfield Unit 1 Corp. The foregoing entities are all wholly owned subsidiaries of FirstEnergy Solutions Corp. which, in turn, is a wholly owned subsidiary of FirstEnergy Corp., a publicly-traded, utility holding company headquartered in Akron, Ohio.

⁵ A list of the nuclear and coal-fired generating plants in PJM believed to be currently operating is provided as Attachment A hereto. As explained in Section II.F, only a subset of these plants would be subject to the requested Order.

⁶ In the past four years, over 11,000 MW of coal-fired generation within the PJM footprint has closed, the equivalent of a dozen large power plants. MONITORING ANALYTICS, LLC, 2017 STATE OF THE MKT. REPORT FOR

announced.⁷ PJM continues to claim that all is well with its system,⁸ but at the same time shows it does not have a clear view of what resilience is, how to measure it, or how to ensure it.⁹ PJM has demonstrated little urgency to remedy this problem any time soon¹⁰ so immediate action by the Secretary is needed to alleviate the present emergency.

I. BACKGROUND AND SUMMARY

It is in the national interest to ensure a dependable, affordable, safe, fuel-secure, and clean supply of electricity produced by a diverse array of energy resources, including coal, natural gas, nuclear material, flowing water, and renewable resources. Such diversity of generation enhances dependable and resilient electric supply, reduces electricity price volatility, ensures the Nation's economic and physical security, and promotes economic development. As you stated recently, "America's greatness depends on a reliable, resilient electric grid powered by an 'all of the above' mix of generation resources" that "must include traditional baseload generation with on-site fuel storage that can withstand major fuel supply disruptions caused by natural and man-made disasters."¹¹ Indeed, "[o]ur economy, government and national defense all depend on electricity. Therefore, ensuring a reliable and resilient electric supply and corresponding supply chain are vital to national security."¹²

PJM, VOL. 2: DETAILED ANALYSIS 544 tbl.12-5 (Mar. 8, 2018), (listing coal unit retirements of 2,239 MW, 7,064.8 MW, 243 MW, and 2,038 MW in 2014, 2015, 2016, and 2017, respectively) http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2017.shtml ("2017 PJM Report").

⁷ See Section II.B, *infra*.

⁸ See, e.g., Comments and Responses of PJM Interconnection, L.L.C. at 4, *Grid Resilience in Regional Transmission Organizations and Independent System Operators*, FERC Docket No. AD18-7-000 (Mar. 9, 2018) ("To be clear, the PJM [Bulk Electric System ("BES")] is safe and reliable today – it has been designed and is operated to meet all applicable reliability standards. However, improvements can and should be made to make the BES more resilient against known and potential vulnerabilities and threats. In many cases, resilience actions are anchored in, but go beyond what is strictly required for compliance with, the existing reliability standards.") ("PJM Comments"); Initial Comments of PJM Interconnection, L.L.C. on the United States Department of Energy Proposed Rule at 25, *Grid Reliability and Resilience Pricing*, FERC Docket No. RM18-1 (Oct. 23, 2017) ("[T]he performance of the PJM system in response to incredibly taxing events like the 2014 Polar Vortex demonstrate the reliability and resilience of the system created by effective transmission planning and development and the energy and capacity markets.").

⁹ See, e.g., PJM Comments at 3-4. *Contrast* Response of the New York System Operator, Inc. at 1, *Grid Resilience in Regional Transmission Organizations and Independent System Operators*, FERC Docket No. AD18-7-000 (Mar. 9, 2018) (referring to "efforts already underway (or being considered) to ensure continued reliable operation and bolster resiliency in response to the evolving nature of the bulk power system in New York").

¹⁰ PJM indicates that it will follow any FERC mandate to study the resiliency issue and, *if* changes are needed, pursue solutions. PJM Comments at 5-6. But the emergency exists presently, not in the future, and immediate action is needed *now*, not more time to study.

¹¹ Letter from Rick Perry, U.S. Sec'y of Energy, to Chairman & Comm'rs of FERC at 1 (Sept. 28, 2017) ("Secretary NOPR Letter").

¹² *Id.* at 2.

The Nation depends heavily on a steady and dependable supply of electricity at all times. Electricity both figuratively and literally powers the Nation—its homes, its businesses, its industries, government buildings, and defense installations. Electricity is thus vital not only to the health, safety, and welfare of the Nation, but also to its economic and physical well-being. Our adversaries understand this too. As explained by Dr. Paul Stockton, former Assistant Secretary of Defense, the Nation's adversaries "may seek to disrupt U.S. defense capabilities by attacking the critical infrastructure on which our military bases rely. . . . The power grid and fuel supplies for power generation are potential targets for these adversaries."¹³ The importance of the electric grid and its fuel supply network to our Nation's well-being cannot be overstated.

Yet, as DOE is undoubtedly aware, threats to the Nation's power supply and grid are real and can no longer be ignored. The Nation's security is jeopardized if DOE does not act now to preserve fuel-secure generation and the diversity of supply.¹⁴ The very diversity of supply that baseload nuclear and coal-fired units provide is being lost more and more each day as more and more of these plants retire because their fuel security and resiliency are not properly recognized and valued by the current administrative market rules. Rather, we, as a Nation, "need to properly recognize the value of each resource, being mindful of its role in our national defense [and] economic security" and, in this regard, "account for the value of on-site fuel storage capability" of nuclear and coal-fired generating resources.¹⁵ To this effect, immediate action is needed to ensure that such traditional baseload generation receives compensation commensurate with the value it provides to the Nation and thus remains in service and available to power the Nation in times of need. As you have noted, "urgent action must be taken to ensure the resilience and security of the electric grid, which is so vitally important to the economic and national security of the United States."¹⁶

The recent cold weather in the East has provided a real-time, real-life demonstration as to why immediate action is so critical to ensure the health and safety of the Nation. From December 27, 2017, through January 8, 2018, the eastern U.S. saw extremely cold temperatures and spiking electric demand, which would likely have been far worse had it occurred only two weeks later after the holiday season ended. If not for the over-performing nuclear and coal-fired generating plants in PJM,¹⁷ the eastern portion of the country would likely have seen grid reliability impacts,

¹³ Comments of Exelon Corp., Testimony of Paul Stockton at 5-6, *Grid Reliability and Resilience Pricing*, FERC Docket No. RM18-1-000 (Oct. 23, 2017).

¹⁴ Secretary NOPR Letter at 8 ("If, for example, we lose our educated workforce or no longer have the ability to build and operate our baseload plants because of short-sighted policies, it will not only weaken our workforce, but will threaten our energy dominance and national security.").

¹⁵ *Id.*

¹⁶ Letter from Rick Perry, U.S. Sec'y of Energy, to Kevin McIntyre, Chairman, FERC at 2 (Dec. 8, 2017) ("Secretary Extension Letter").

¹⁷ See, e.g., Tim Loh, Chris Martin & Naureen S. Malik, *America's Deep Freeze is Aiding Coal and Sending Power Up*, BLOOMBERG (Dec. 28, 2017), <https://www.bloomberg.com/news/articles/2017-12-28/america-s-deep-freeze-is-aiding-coal-and-sending-power-surging> ("In the PJM market . . . coal has once again surged past natural gas to become the biggest fuel for power generation."); Tiffany Hsu, *Deep Freeze in U.S. Creates Heating Squeeze for Homeowners and Utilities*, N.Y. TIMES (Jan. 3, 2018).

as natural gas plants significantly underperformed in large part due to natural gas price spikes and supply interruptions.¹⁸ As a recent DOE study of this cold weather event found (the “NETL Report”), nuclear and coal-fired generation provided 70 percent of output during the event and “coal units in PJM were uniquely positioned to provide the resilience needed at this critical point in time,” providing “74 percent of incremental energy.”¹⁹ The study went on to conclude that:

In the case of PJM, it can also be shown that the demand could not have been met without coal. At peak demand, January 5, 2018, natural gas prices exceeded \$95/MMBtu in eastern PJM. Had coal been removed, a 9-18 GW capacity shortfall would have developed, depending on assumed imports and generation outages, leading to system collapse.²⁰

As the report stated, “[e]xperience with such blackouts indicates the potentially enormous toll in both economic losses and human suffering associated with widespread lack of electricity.”²¹

<https://www.nytimes.com/2018/01/03/business/heating-homeowners-winter.html> (noting that due to high heating demand, “[m]any utilities turned to coal and oil to generate electricity as the price of natural gas, their usual fuel of choice, surged”); Jeremiah Shelor, *Extreme Cold Drives Record-Setting Week in NatGas Cash; Futures See Warm-Up Ahead*, NATURAL GAS INTELLIGENCE (Jan. 5, 2018), <http://www.naturalgasintel.com/articles/112977-extreme-cold-drives-record-setting-week-in-natgas-cash-futures-see-warm-up-ahead> (“With blizzard conditions arriving late in the week along the East Coast just in time to pile on after recent bitterly cold temperatures, natural gas spot price blowouts ran rampant The conditions driving the exorbitant cash prices appeared to be a perfect storm of widespread weather-driven demand and pipeline constraints.”); PJM INTERCONNECTION, PJM COLD SNAP PERFORMANCE DEC. 28, 2017 TO JAN. 7, 2018 13 & fig.10 (Feb. 26, 2018), *available at* <http://www.pjm.com/-/media/library/reports-notice/weather-related/20180226-january-2018-cold-weather-event-report.ashx> (reporting that nuclear and coal generation combined constituted 63% of the online fuel mix during the 2018 cold snap) (“PJM COLD SNAP PERFORMANCE 2018”).

¹⁸ See, e.g., Naureen S. Malik, *Blizzard Triggers 60-Fold Surge in Prices for U.S. Natural Gas*, BLOOMBERG (Jan. 4, 2018), <https://www.bloomberg.com/news/articles/2018-01-04/natural-gas-in-u-s-soars-to-world-s-priciest-as-snow-slams-east>; *Cold Weather, Higher Exports Result in Record Natural Gas Demand*, ENERGY INFO. ADMIN. (“EIA”) (Jan. 5, 2018), <https://www.eia.gov/todayinenergy/detail.php?id=34412> (noting record natural gas demand due in part to recent cold weather); PJM COLD SNAP PERFORMANCE 2018 at 16 (concluding that “[g]as supply issues were the largest” cause of forced outages due to fuel supply issues during the 2018 cold snap, “particularly the weekend of Jan. 6 and Jan. 7, as temperatures reached their lowest points,” and that supply issues “include transportation restrictions and interruptions as well as spot gas commodity availability”).

¹⁹ NAT’L ENERGY TECH. LAB., RELIABILITY, RESILIENCE AND THE ONCOMING WAVE OF RETIRING BASELOAD UNITS VOLUME I: THE CRITICAL ROLE OF THERMAL UNITS DURING EXTREME WEATHER EVENTS 12 (Mar. 13, 2018) (“NETL Report”), *available at* <https://www.netl.doe.gov/research/energy-analysis/search-publications/vuedetails?id=2594>. To the extent necessary, Applicants incorporate the NETL Report by reference as if it were filed in full as an attachment to this Application. The findings in the NETL Report fully support the Secretary determining that an emergency exists within the meaning of FPA Section 202(c) that warrants immediate action.

²⁰ *Id.* at 17 (emphasis added).

²¹ *Id.* at 3.

Overall, DOE estimated that “the value of [coal- and oil-]based power generation resilience” in PJM during this cold weather event was \$3.5 billion.²²

But this is not the first time nuclear and coal-fired generation has saved PJM. In January 2014, a “Polar Vortex” spiked customer demand, dropping system reserves in PJM to just 500 MW (on a demand of over 140,000 MW).²³ PJM calculated that 9,300 MW of generation was unavailable during this event due to interruptions in the natural gas supply to generators.²⁴ While this loss of generating capacity could have been catastrophic, multiple coal-fired generating units slated for retirement were dispatched to meet electric demand²⁵ and nuclear generators also “performed extremely well.”²⁶ “Sixty-five million people within the PJM footprint could have been affected if these traditional baseload units were not available.”²⁷

Combined, the Polar Vortex and this past winter’s extreme cold have shown the value that nuclear and coal-fired generators bring to the electric grid. Just as temperatures plummeted during these periods, the output of nuclear and coal-fired generators spiked. Specifically, during the period December 26, 2017, through January 6, 2018, coal-fired and nuclear generation in PJM averaged output levels of 46,038 MW and 35,485 MW, respectively.²⁸ These levels are over 50 percent greater than the average output of coal-fired generation during the 24 months ending September 2017 (of 29,849 MW) and over 10% greater than the average output of nuclear generation during those 24 months (of 32,167 MW).²⁹ Further, the output levels of coal-fired generators over this 12-day period are well above historical January levels, which tend to see the highest average outputs of such units of any months of the year.³⁰ By any measure, the output of coal-fired and nuclear generating facilities in PJM was exceptional over these recent 12 days.

²² *Id.* at 1, 16.

²³ PJM INTERCONNECTION, ANALYSIS OF OPERATIONAL EVENTS AND MARKET IMPACTS DURING THE JANUARY 2014 COLD WEATHER EVENTS 4 (May 8, 2014), *available at* <http://www.pjm.com/~media/library/reports-notices/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-cold-weather-events.ashx>.

²⁴ *Id.* at 26.

²⁵ Secretary NOPR Letter at 3.

²⁶ *See id.* (citing U.S. DEP’T OF ENERGY, STAFF REPORT TO THE SECRETARY ON ELECTRICITY MARKETS AND RELIABILITY 95 (Aug. 2017) (“Staff Report”).

²⁷ Secretary NOPR Letter at 3.

²⁸ *See Generation by Fuel Type*, PJM INTERCONNECTION, http://dataminer2.pjm.com/feed/gen_by_fuel.

²⁹ *See* PJM INTERCONNECTION, STATE OF THE MARKET REPORTS FOR 2012 THROUGH Q3 2017, http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2018.shtml (as converted from GWh to MW).

³⁰ Specifically, during the three Januarys from 2015 to 2017, coal-fired generation in PJM averaged output of 37,234 MW (and nuclear generation averaged 34,845 MW). *See id.*

The chart below illustrates the spike in nuclear and coal-fired output over this period.³¹ Notably, coal- and oil-fired generation spiked, and nuclear generation rose materially, but gas-fired generation dropped, not only from its average output levels but even from levels seen only a few days prior. As Andrew Ott, PJM's President and CEO, recently testified:

[D]uring this recent cold weather event, obviously more than half of the total supply was coal and nuclear. Certainly, [PJM] couldn't survive without gas; [PJM] couldn't survive without coal; [PJM] couldn't survive without nuclear. [PJM needs] them all in the moment. And I think the key, and what [PJM is] focused on, is each of these bring to the table reliability characteristics. Each of these was online when [PJM] needed them.³²

The strong performance of the nuclear and coal-fired units in PJM was a needed counterbalance to the situation for gas-fired units. Specifically, during the cold snap, dramatic price increases were seen in natural gas prices; including for example a spike in PJM at the Texas Eastern M3 interface, in Southeastern Pennsylvania, from a normal level near \$3/MMBtu to \$96/MMBtu.³³ Further, "in eastern PJM . . . gas and electric transmission were severely constrained, leading to . . . elevated natural gas and electricity prices across [the] region."³⁴ The price increases would have been even more dramatic but for the over performance of nuclear and coal-fired units.

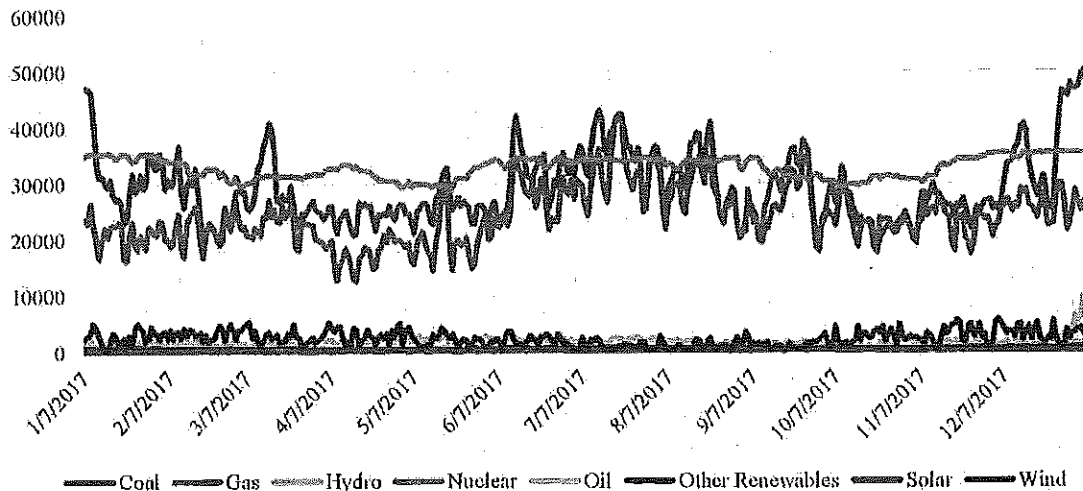
³¹ See *Generation by Fuel Type*, PJM INTERCONNECTION, http://dataminer2.pjm.com/feed/gen_by_fuel. This chart excludes March 29, March 30, and April 2, 2017 because no data was reported for those dates.

³² Press Release, Sen. Lisa Murkowski, Hearing Spotlights Importance of Energy Infrastructure, Diverse Fuel Mix (Jan. 23, 2018) (quoting Andrew Ott), <https://www.murkowski.senate.gov/press/release/hearing-spotlights-importance-of-energy-infrastructure-diverse-fuel-mix>.

³³ NETL Report at 14.

³⁴ *Id.* at 6. See also *id.* at 7 (showing a four-fold increase in daily load weighted average marginal electricity price in PJM between December 30, 2017 and January 6, 2018).

PJM Average Hourly Output By Fuel Type (MW)



But the very same nuclear and coal-fired power plants that allowed PJM to maintain reliability during these extreme weather events are at imminent risk of permanent closure if something is not done *now*. The Energy Information Administration “projects 41 GW of coal and 10 GW of nuclear retirements by 2025,” but, as the NETL Report notes, this projection does not “adequately capture[] the risk” of retirements.³⁵ The report further projects that “as much as 75 GW of coal-fired generation could be retired” by 2025, and notes that another source estimates between “30 and 50 GW of nuclear could face retirement.”³⁶ Without these plants, thousands if not millions of customers could have been without power during sub-zero degree temperatures. And absent immediate and decisive action by DOE, the 11,000 MW of nuclear and coal-fired generation that have kept PJM operating during this period will begin to retire *in the very near future*. As Andrew Ott, PJM’s President and CEO, recently testified, 1,410 MW of nuclear capacity and 3,688 MW of coal-fired capacity that operated during the recent cold snap in the eastern U.S. are scheduled to deactivate within the next five years.³⁷ This testimony is consistent with the NETL Report’s finding that:

The 30 GW of coal that ramped up to meet the surge in PJM load [during the recent cold weather event] clearly includes the units most likely to retire due to insufficient market support, given those units were not running at baseload levels before the event. As more of

³⁵ NETL Report at 25.

³⁶ *Id.* at 30.

³⁷ U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Mike Lee (Jan. 23, 2018).

these units retire, the ability of the system to respond to extreme events with reliance, let alone economically, deteriorates.³⁸

Further, it is a matter of public record that FirstEnergy Solutions, which through Applicants indirectly owns 12,300 MW of generation, likely will file for bankruptcy by the end of March 2018.³⁹ Indeed, Charles Jones, CEO of FirstEnergy Corp., recently stated that he would be “shocked” if FirstEnergy Solutions did not file soon.⁴⁰ FirstEnergy Solutions already submitted notice to PJM that it would deactivate its nuclear assets—Davis-Besse and Perry in Ohio and Beaver Valley in Pennsylvania—in 2020 and 2021.

“Distorted price signals” in the organized markets overseen by the Federal Energy Regulatory Commission (“FERC”), such as PJM, “have resulted in under-valuation of grid reliability and resiliency benefits provided by traditional baseload resources, such as [those powered by] coal and nuclear” fuel.⁴¹ As you have recognized, “[b]ecause wholesale pricing in those markets does not adequately consider or accurately value those benefits, generation units that provide the benefits are often not fully compensated for them.”⁴² The NETL Report similarly summarized the problem: “Markets do not currently compensate resilience, and thus that capability is steadily diminishing due to competitive pressures of ongoing, baseload power plant early retirements.”⁴³

This lack of appropriate compensation, among other things, has resulted in the Nation’s nuclear and coal-fired generation closing at an alarming and unprecedented rate. For example “between 2002 and 2016, 531 coal[-fired] generating units representing approximately 59,000 MW of generation capacity retired from the U.S. generation fleet.”⁴⁴ In addition, “[i]t is anticipated that approximately 12,700 MW of coal[-fired generation] will retire through 2020.”⁴⁵ Further, “between 2002 and 2016, 4,666 MW of nuclear generating capacity was announced for

³⁸ NETL Report at 18.

³⁹ Gavin Bade, *FirstEnergy CEO Says Generation Subsidiary Headed for Bankruptcy Protection*, UTILITY DIVE (Feb. 23, 2018), <https://www.utilitydive.com/news/firstenergy-cco-says-generation-subsidiary-headed-for-bankruptcy-protection/517743/>; Jeffrey Ryser, *FirstEnergy Continues Push Away from Competitive Generation Subsidiary*, PLATTS MEGAWATT DAILY (Feb. 22, 2018).

⁴⁰ Recording of Fourth Quarter 2017 Earnings Webcast, FIRSTENERGY (Feb. 21, 2018), <https://services.choruscall.com/links/fe180221.html> (Mr. Jones stating, at 25:18, “Well, I said in my prepared remarks that I expect that [FES] will be removed from the unregulated money pool between now and the end of March, and that will be the last tie that we have with that business. While I can’t speak for FES, I will be shocked if they go beyond the end of March without some type of a filing.”).

⁴¹ Secretary NOPR Letter at I.

⁴² *Id.* at 3.

⁴³ NETL Report at 3.

⁴⁴ Secretary NOPR Letter at 2 (citing Staff Report at 22).

⁴⁵ *Id.* (citing EIA, *Monthly Update to the Annual Electric Generator Report*, Form EIA-860m (June 2017), <https://www.eia.gov/electricity/data/eia860m/>).

retirement” and “[e]ight reactors representing 7,167 MW of nuclear capacity . . . have announced retirement plans since 2016.”⁴⁶

These retirements must stop immediately in PJM lest the grid be placed at risk of failure through a lack of generation diversity and over-reliance on generating units that lack secure fuel supply and often compete with other industries and customers for limited firm fuel delivery capabilities. As your staff found, “fuel supply chain disruptions can impact many generators during a single widespread fuel shortage event,” but “[n]uclear and coal[-fired power] plants typically have advantages associated with onsite fuel storage. . . .”⁴⁷ Such generating units with on-site storage capacity kept PJM from shedding load during the 2014 Polar Vortex when available generating capacity was only a hair’s width more than demand. And such units have been critical to keeping the grid supplied during the severe cold weather in the East this past winter. But the continued existence of such fuel-secure, baseload units cannot be taken for granted. Unless immediate action is taken, they will continue to retire and PJM and the Nation are likely not to be so lucky as to avoid load-shedding (or worse) the next time generation supply is stretched to its limit.

FERC has for several years failed to heed this warning and to act to prevent this impending crisis. Indeed, FERC has had the opportunity to prevent this crisis on numerous occasions, including the opportunity you provided it through your Notice of Proposed Rulemaking (“NOPR”) issued pursuant to FPA Section 403.⁴⁸ Although you granted FERC’s request to extend the NOPR proceeding, you stated that you would continue to examine “all options within [your] authority under the *Department of Energy Organization Act*, the *Federal Power Act*, and any other authorities to take remedial action as necessary to ensure the security of the nation’s electric grid.”⁴⁹

Despite the fact that the time for such remedial action has come, FERC terminated your rulemaking proceeding and chose instead merely to study the issue further.⁵⁰ And although FERC acknowledged that “resilience remains an important issue that warrants the Commission’s continued attention,”⁵¹ it dismissed evidence establishing the threat to resilience posed by the

⁴⁶ *Id.* at 3 (citing Staff Report at 29-30).

⁴⁷ Staff Report at 91. *See also* NETL Report at 14 (“As for natural gas-fired electricity generation, two significant constraints inhibit its fuel resilience contribution during extreme weather events Most importantly, demand from competing sectors, especially from residential and commercial space heating, takes priority over electricity for natural gas use, limiting and even diminishing the capacity potential for natural gas-based electricity. Compounding this constraint is that of pipeline capacity. Even though abundant natural gas may be available, it must flow through the same limited pipeline capacity already delivering to increased heating demand.”).

⁴⁸ *See generally* Secretary NOPR Letter. *See also* NETL Report at 3 (“The need for reasonable compensation to maintain resilient capacity to endure such periodically-certain threats to the nation formed the basis of [DOE’s] resilience compensation proposal to [FERC].”).

⁴⁹ Secretary Extension Letter at 2 (*italics in original*).

⁵⁰ *Grid Reliability and Resilience Pricing et al.*, 162 FERC ¶ 61,012 (2018).

⁵¹ *Id.* at P 13.

imminent loss of additional nuclear and coal-fired generation and found instead that “the extensive comments submitted by the [regional transmission organizations and independent system operators (“RTOs/ISOs”)] do not point to any past or planned generator retirements that may be a threat to grid resilience.”⁵² Further, FERC concluded that it lacked the legal authority to act on your proposed rule for lack of a showing that current rules were unjust or unreasonable.⁵³

FERC’s response was disappointing. FERC’s reliance on comments by RTOs/ISOs—the very entities that preside over the flawed markets—is misplaced.⁵⁴ More fundamentally, FERC’s decision to study the issue further is too little, too late. As Commissioner Chatterjee noted, “[m]ajor regulatory reform efforts often can take several years to complete.”⁵⁵ The record before FERC, however, demonstrated that the time to act is now. Multiple commenters expect that the trend of premature, economic retirement of nuclear and coal-fired generators will continue if left unaddressed.⁵⁶ Indeed, seven nuclear units (representing 10,500 MW of nameplate capacity) are planning to retire by 2025.⁵⁷ And owners of other nuclear units have stated publicly that they do not intend to invest further in their nuclear units unless and until their host states pass legislation that subsidizes the units.⁵⁸

Even more troubling is that PJM has followed FERC’s lead and decided to kick the can down the road on this critical issue. In its Comments and Responses to FERC’s initiation of a new proceeding on grid resilience, PJM concludes that its bulk electric system “is safe and reliable today—it has been designed and is operated to meet all applicable reliability standards.”⁵⁹ While PJM acknowledged that “generation and other resources” supply essential attributes that support reliability and that “the maintenance or assurance of these attributes into the future are important to resilience mitigation,” PJM has committed to nothing more than further study of the issue.⁶⁰ And PJM’s position is all the more questionable in light of its admission that it does not conduct

⁵² *Id.* at P 15.

⁵³ *Id.* at P 14 (“For the reasons discussed below, the Proposed Rule did not satisfy those clear and fundamental legal requirements under section 206 of the FPA. Given those legal requirements, we have no choice but to terminate Docket No. RM18-1-000.”).

⁵⁴ Among other justifications for taking no action, FERC noted that the RTOs, and the industry more generally, do not have a clear definition or understanding of the resilience issue. *Id.* at P 22. As such, FERC’s decision to take no action was based on incomplete information.

⁵⁵ *Id.* at Chatterjee Concurrence.

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ Public Service Enterprise Group Inc., SEC Form 8-K, at 2 (Feb. 28, 2018).

⁵⁹ PJM Comments at 4.

⁶⁰ *Id.* at 46 (“PJM will need to continue to conduct analysis of the anticipated future availability of these attributes so that it can proactively address the maintenance of these attributes through the markets. PJM will also consider the operational lessons learned from other RTOs in regard to resource mix and essential resource attributes to continue to analyze future trends in resource mix and their impacts on both reliability and resilience.”).

system planning or operations subject to formal resilience criteria, and that it would need additional FERC authorization in order to do so.⁶¹

PJM's conclusion misses the point. As you noted, "urgent action must be taken to ensure the resilience and security of the electric grid."⁶² It is insufficient and wholly illogical to say that action is not needed going forward because PJM meets today's reliability criteria. PJM's comments demonstrate that it has yet to identify and measure resilience, much less taken steps to preserve the resilience of its electric grid.⁶³ Indeed, many of PJM's requests to the Commission do nothing more than pass the buck back to FERC on this critical issue.⁶⁴

Further, PJM's requests for action "to enhance resilience of the grid and interrelated systems"⁶⁵ will not address your concerns regarding the resilience and security of the Nation's electric grid. These requests, which call for additional FERC proceedings and RTO/ISO filings, in some cases require no action by any party for nine to twelve months *after the conclusion of the current FERC proceeding* and will do nothing to stem the tide of premature nuclear and coal-fired plant closures in the interim.⁶⁶ This is particularly alarming because PJM acknowledges that its Capacity Performance changes have failed to produce a long-term solution "to meet the ever-growing demand for gas transportation by the generation sector."⁶⁷ Indeed, natural gas availability

⁶¹ *Id.* at 33-34.

⁶² Secretary Extension Letter at 2.

⁶³ *See, e.g.*, PJM Comments at 37 ("Because PJM does not have formal resilience criteria, PJM adapts existing analyses . . . to derive conclusions about the ability of the PJM BES to withstand a high-impact, low-frequency event, and is working with stakeholders to determine how best to incorporate resilience into PJM's planning process and what criteria should be used."); *id.* at 66 ("RTO wholesale electricity, Ancillary Service markets, capacity markets, and shortage pricing mechanisms were not originally designed specifically with resilience in mind.").

⁶⁴ *See, e.g., id.* at 5 (requesting that FERC "[a]rticulate in this docket that the regional planning responsibilities of RTOs . . . includes an obligation to assess resilience"); *id.* (requesting that FERC "[e]stablish a Commission process . . . that would allow an RTO to receive verification as to the reasonableness of its assessments of vulnerabilities and threats").

⁶⁵ *See* PJM Comments at 5-8.

⁶⁶ *See, e.g., id.* at 6 ("Request that all RTOs . . . submit a subsequent filing . . . to implement resilience planning criteria, and develop processes for the identification of vulnerabilities, threat assessment and mitigation, restoration planning, and related process or procedures needed to advance resilience planning."); *id.* ("Request that all RTOs . . . submit a subsequent filing, including any necessary proposed tariff amendments, for any proposed market reforms and related compensation mechanisms to address resilience concerns within nine to twelve months from the issuance of a Final Order in this docket.").

⁶⁷ *Id.* at 57-58 ("Although PJM was hoping that the Capacity Performance changes would spur a corresponding array of new service offerings by pipelines (and generators seeking such options), at least on the public record such new pipeline services have not been offered as new open season requests [N]ew flexible services, to the extent they have been offered, appear to have been confined to the secondary market in which available gas from LDCs or industrial customers is made available, for a price, on the non-transparent bilateral secondary market. Although this is an effective short term strategy to 'move around' available capacity and take advantage of diversity in demand, it cannot, in the long run, serve as the sole means to meet the ever-growing demand for gas transportation by the generation sector."). PJM's admission that the Capacity Performance program fell short

during the recent cold weather in the eastern U.S. has prompted PJM to consider enacting emergency operational cost procedures for use when emergency conditions affect the grid or gas pipeline system.⁶⁸ PJM's efforts to "to engage interstate pipelines and LDCs to review gas pipeline contingencies"⁶⁹ similarly have failed to produce a long-term solution.

The lack of protection for at-risk nuclear and coal-fired plants during this time actually undermines the effectiveness of other PJM requests. For example, PJM requests that FERC require it to file proposed tariff amendments "to permit non-market operations during emergencies," which "could includ[e] provisions for cost-based compensation when the markets are not operational or when a wholesale supplier is directed to take certain emergency actions by PJM for which there is not an existing compensation mechanism."⁷⁰ FERC's and PJM's inaction, however, has significantly increased the risk that the very plants needed to take these emergency actions will have shuttered by the time PJM files and FERC approves these tariff provisions.

These events demonstrate that, absent immediate intervention by the Secretary, nuclear and coal-fired plants will continue to retire prematurely. In view of this regulatory failure, and as further detailed herein, Applicants seek action from the Secretary to ensure the continued operation of baseload nuclear and coal-fired power plants in PJM. Such immediate action is necessary to address an emergency in the bulk power system overseen by PJM and to serve the public interest by preventing power disruptions and system blackouts. Absent such an order, health care facilities, emergency services, and other critical infrastructure could be without power affecting portions of the 65 million people that reside within the PJM footprint.

contrasts sharply with its prior assurances to FERC that the Capacity Performance program would result in firm fuel supply. PJM Interconnection, L.L.C., Reforms to the Reliability Pricing Market ("RPM") and Related Rules in the PJM Open Access Transmission Tariff ("Tariff") and Reliability Assurance Agreement Among Load Serving Entities ("RAA") at 53, FERC Docket No. ER15-623-000 (Dec. 12, 2014) ("Capacity Market Sellers that now will face more harsh financial consequences for a failure to perform during emergencies (with no limit on when such emergencies arise) will likely need to invest in plant design changes or new equipment, or increase operating budgets to accommodate more staff, firm fuel delivery arrangements, greater inventories, or changed operating practices.").

⁶⁸ Jared Anderson, *PJM Mulls Emergency Operational Cost Issues*, PLATTS MEGAWATT DAILY (Jan. 10, 2018).

⁶⁹ PJM COLD SNAP PERFORMANCE 2018 at 21-22.

⁷⁰ PJM Comments at 6.

II. APPLICATION FOR EMERGENCY ORDER

In the United States, RTOs work to ensure the operation and security of the bulk electric power system. PJM operates the electric grid and centralized electricity markets in all or part of 13 different states and the District of Columbia,⁷¹ overseeing over 178,000 MW of installed capacity and serving approximately 65 million people.⁷² Over half of PJM's generating capacity is nuclear and coal-fired generation,⁷³ and nearly one-quarter of the Nation's nuclear and coal-fired generating capacity is located within PJM.⁷⁴

PJM's power markets, however, consistently fail to compensate nuclear and coal-fired generators for the full value of the benefits that they provide, such as fuel security and diversity. As stated by a former Commissioner of FERC, "I believe that fuel diversity is really key in ensuring reliability going forward, even in these dynamic times . . . [I]t is imperative that we protect fuel diversity."⁷⁵ Such continued fuel diversity in PJM, however, is at risk.

PJM's independent market monitor recently found that between six and nine nuclear plants, with a total capacity of 7,058 MW to 14,027 MW, did not recover their avoidable costs—the costs to keep the generators operating—in two of the last three years.⁷⁶ Additionally, four nuclear plants, with capacity of 3,554 MW, are not expected to recover their annual avoidable costs on average from 2018 through 2020.⁷⁷ The market monitor similarly found that a "significant number of coal units are at risk of retirement" because 17,302 MW of coal-fired capacity is expected to receive less than 90 percent of its avoidable costs.⁷⁸ Overall, the market monitor found that, in addition to units currently planning to retire, between 22,929 MW and 30,785 MW of capacity in PJM,

⁷¹ PJM's territory includes all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia. *Who We Are*, PJM, <http://www.pjm.com/about-pjm/who-we-are.aspx> (last visited Mar. 22, 2018); *PJM's Mission & Vision*, PJM, <http://www.pjm.com/about-pjm/who-we-are/mission-vision.aspx> (last visited Mar. 22, 2018).

⁷² *Capacity by Fuel Type*, PJM (June 1, 2017), <http://www.pjm.com/-/media/markets-ops/ops-analysis/capacity-by-fuel-type-2017.ashx?la=en>; *Who We Are*, PJM, <http://www.pjm.com/about-pjm/who-we-are.aspx> (last visited Mar. 22, 2018).

⁷³ *Capacity by Fuel Type*, PJM (June 1, 2017) (showing nuclear and coal-fired generation represent 19% and 33% of PJM's installed generation capacity, respectively).

⁷⁴ *Compare id.* (showing that nuclear and coal-fired generation represent 33,992 MW and 59,835 MW of PJM's installed generation capacity, respectively), with *Preliminary Monthly Generator Inventory*, EIA (June 2017), <https://www.eia.gov/electricity/data/eia860m/> (showing, when filtered by "Technology," 284,439 MW of conventional steam coal generator nameplate capacity and 104,628 MW of nuclear generator nameplate capacity as of June 2017 nationwide).

⁷⁵ *Oversight of the Federal Energy Regulatory Commission: Hearing Before the Subcomm. on Energy and Power*, 114th Cong., Prelim. H'rg. Tr. at 54 (2015) (testimony of Colette D. Honorable, Commissioner, FERC).

⁷⁶ 2017 PJM Report at 2.

⁷⁷ *Id.*

⁷⁸ *Id.*

primarily from nuclear and coal-fired generation, is at risk of retirement.⁷⁹ In fact, the market monitor found that over 90 percent of the “at-risk” generation in PJM was either nuclear or coal-fired.⁸⁰ But new nuclear and coal-fired generation will not replace this lost capacity because, as the market monitor found, “[i]n 2017 . . . a new coal plant and a new nuclear plant would have been significantly unprofitable.”⁸¹

By contrast, nearly all oil, natural gas, hydroelectric, and pumped storage generators recovered fully their avoidable costs in 2017.⁸² This marked difference is a result of the fact that nuclear and coal-fired units are baseload plants. As such, they are designed to run “24/7” on a consistent basis with 25 days of on-site fuel availability (when running “full bore”), making them the backbone of the electric system.⁸³ PJM’s energy market, though, is designed not to consider or incentivize operational diversity, fuel security, or system resiliency. Rather, it dispatches generation units based only on short-term marginal price without regard for the fixed costs of the facility, or the firmness of its fuel supply or transportation. Specifically, PJM uses a reliability-constrained least-cost model to dispatch the lowest-cost units required to satisfy electricity demand.⁸⁴ But because nuclear and coal-fired units are designed to run continuously, they often continue to operate through lower-priced periods—such as the middle of the night—sometimes requiring them to sell their electricity output at a loss. This is particularly true in states with large amounts of wind-powered generation, as wind tends to generate at its peak overnight when electricity demand is low.⁸⁵ The unavoidable requirement to operate during lower-priced periods places significant financial strain on baseload units such as nuclear and coal-fired generators that are not properly compensated in the existing markets.⁸⁶ All indications are that these trends will continue.

⁷⁹ *Id.*

⁸⁰ *Id.* at tbl.7-36.

⁸¹ *Id.* at 6.

⁸² *Id.* at tbl.7-30.

⁸³ See N. AM. ELEC. RELIABILITY CORP., POLAR VORTEX REVIEW 36-37 (Sept. 2014), http://www.nerc.com/pa/irm/January%202014%20Polar%20Vortex%20Review/Polar_Vortex_Review_29_Sep_t_2014_Final.pdf (“[A] growing dependence on gas-fired generation can increase the [bulk power system’s] exposure to disruptions from insufficient fuel supply, transportation, and delivery. . . . Unlike coal and fuel oil, natural gas is not easily stored on site.”). Cf. PJM INTERCONNECTION, PJM’S EVOLVING RESOURCE MIX AND SYSTEM RELIABILITY 35 (Mar. 30, 2017) (“[R]ecent studies, including the Black Sky/Black Start Protection Initiative, suggest that 30 days of fuel inventory would be required to adequately respond to Black Sky type events.”).

⁸⁴ See *Market for Electricity*, PJM, <http://learn.pjm.com/electricity-basics/market-for-electricity.aspx> (last visited Mar. 22, 2018).

⁸⁵ See, e.g., Scott DiSavino, *Texas Power Demand to Hit 2016 Peak Amid Heat Wave: ERCOT*, REUTERS (Aug. 4, 2016), <http://www.reuters.com/article/us-usa-texas-power-heatwave-idUSKCN10F202> (noting that wind generation in ERCOT “typically produce[s] most energy overnight”).

⁸⁶ Markets only provide signals that lead to efficient decisions on the part of market participants if the markets “efficiently price all valuable services provided to the system.” FirstEnergy Reply Comments, Ex. 1 (“Hunger Reply Aff.”) at 9, *Grid Resiliency Pricing Rule*, FERC Docket No. RM18-1-000 (Nov. 7, 2017).

PJM's market monitor cursorily dismissed this undeniable trend of nuclear and coal-fired generation retirements because of under-recovery, stating that "[m]any generating plants have retired in PJM since the introduction of markets and many generating plants have been built since the introduction of markets" and that "[t]he fact that some plants are uneconomic does not call into question the fundamentals of PJM markets."⁸⁷ This response is alarming to say the least. Nuclear and coal-fired generation provides substantial resilience and security benefits to the electric grid and to the Nation. Indeed, as the market monitor itself recognized, "[s]ignificant reliance on specific fuels, including nuclear, coal and gas means that markets are at risk from a significant disruption in any one fuel."⁸⁸ By treating the lost nuclear and coal-fired capacity the same as the non-nuclear and non-coal-fired capacity that has replaced it, the market monitor ignores the significant threat to the electric grid and the Nation's security posed by the loss of resilient, fuel-secure baseload generation.

As explained below, Applicants request that DOE determine that an emergency exists in PJM within the meaning of FPA Section 202(c) with respect to a threat to energy security and reliability, and thus direct the subject baseload nuclear and coal-fired generators to enter into contracts and all necessary arrangements with PJM, on a plant-by-plant basis, to generate, deliver, interchange, and transmit electric energy, capacity, and ancillary services to maintain fuel diversity and grid dependability and resiliency within the PJM region.

A. The Secretary's Authority Under Section 202(c) of the Federal Power Act

Section 202(c) of the Federal Power Act grants the Secretary the authority to determine "that an emergency exists by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy,"⁸⁹ and, once such a determination is made, "to require by order such temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy as in [his] judgment will best meet the emergency and serve the public interest."⁹⁰

The Secretary's authority and discretion under Section 202(c) is quite broad and is not limited to emergencies caused by war or limited in duration. Section 202(c) states that it may be invoked during times of war or during emergencies, and empowers the Secretary "whenever [he] determines that an emergency exists by reason of" certain specified market conditions "or other causes" to order actions "as in [his] judgment will best meet the emergency and serve the public interest."⁹¹

⁸⁷ 2017 PJM Report at 2.

⁸⁸ *Id.* at 5.

⁸⁹ 16 U.S.C. § 824a(c)(1).

⁹⁰ *Id.*

⁹¹ *Id.* The legislative history of Section 202(c) confirms this interpretation, explaining that in crisis conditions DOE should be "ready to do all that can be done in order to prevent a break-down in electric supply." S. Rep. No. 74-621, at 49.

DOE's regulations define emergency broadly, stating that an emergency "can result from a sudden increase in customer demand, an inability to obtain adequate amounts of the necessary fuels to generate electricity, or a regulatory action which prohibits the use of certain electric power supply facilities."⁹² In addition, the regulation also states that "[e]xtended periods of insufficient power supply as a result of inadequate planning or the failure to construct necessary facilities can result in an emergency"⁹³

The current situation in PJM constitutes such an emergency.

B. An Emergency Exists Due to the Recent and Imminent Critical Reduction in Nuclear and Coal-Fired Generation Capacity

The Nation's bulk electric system is undergoing rapid change. As the DOE recently recognized, the provision of electricity provides various benefits that are not recognized or compensated by the markets created by these politically driven actions:

Society places value on attributes of electricity provision beyond those compensated by the current design of the wholesale market.

- Americans and their elected representatives value the various benefits specific power plants offer, such as jobs, community economic development, low emissions, local tax payments, resilience, energy security, or the national security benefits associated with a nuclear industrial base. Most of these benefits are not recognized or compensated by wholesale electricity markets.⁹⁴

Indeed, the DOE's January 2017 Quadrennial Energy Review states that "[s]hort-run markets may not provide adequate price signals to ensure long-term investments in appropriately configured capacity" and "resource valuations tend not to incorporate superordinate network and/or social values such as enhancing resilience into resource or wires investment decision making."⁹⁵ IHS Energy has found that, as a result of this "missing money" problem, "the loss of

⁹² 10 C.F.R. § 205.371.

⁹³ *Id.*

⁹⁴ Staff Report at 11.

⁹⁵ U.S. DEP'T OF ENERGY, TRANSFORMING THE NATION'S ELECTRICITY SYSTEM: THE SECOND INSTALLMENT OF THE QUADRENNIAL ENERGY REVIEW 4-41 (January 6, 2017), available at <https://www.energy.gov/sites/prod/files/2017/02/f34/Quadrennial%20Energy%20Review--Second%20Installment%20%28Full%20Report%29.pdf>.

power supply diversity is accelerating because too many power plants are retiring before it is economic to do so.”⁹⁶

This market failure is reaching a crisis point. Dr. David Hunger, a former FERC Staff member and Vice President within the Energy Practice of Charles River Associates, found that “there were more [generator] retirements in the seven-year period from 2010 to 2016 (457 units) than in the 20-year period from 1990 to 2009 (358 units). Likewise, the quantity of nuclear and coal-fired generation capacity retired in 2010-2016 (68,540 MW nameplate) was more than double that in the prior 20 years, 1990-2009 (26,721 MW nameplate).”⁹⁷ As the DOE concluded, “[g]enerator profitability could become a public policy concern if so much generation is financially challenged that the reliability or resilience of the [bulk power system] become threatened.”⁹⁸ The rash of nuclear and coal-fired generator closings and other recent events in PJM are evidence that it already is a public policy concern. But these are not the only warning signs.

January 2014 Polar Vortex in PJM: A severe cold snap spiked customer demand, dropping system reserves in PJM to just 500 MW (on a demand of over 140,000 MW).⁹⁹ PJM calculated that 9,300 MW of generation was unavailable during this event due to interruptions in the natural gas supply to generators.¹⁰⁰ While this loss of generating capacity could have been catastrophic, multiple coal-fired generating units slated for retirement were dispatched to meet electric demand¹⁰¹ and nuclear generators also “performed extremely well.”¹⁰² “Sixty-five million people within the PJM footprint could have been affected if these traditional baseload units were not available.”¹⁰³

Extreme Cold in December 2017 and January 2018: From December 27, 2017, to January 8, 2018, the eastern U.S. saw extremely cold temperatures and spiking electric demand, which again illustrate how such weather impacts natural gas supply to electric generating units. Nuclear

⁹⁶ IHS ENERGY, THE VALUE OF US POWER SUPPLY DIVERSITY 7 (July 2014), *available at* <https://www.nei.org/CorporateSite/media/filefolder/Backgrounders/Reports-Studies/IHS-Fuel-Diversity-Study-18-July-2014.pdf?ext=.pdf>.

⁹⁷ FirstEnergy Comments, Ex. 4 (“Hunger Aff.”) at 22, *Grid Resiliency Pricing Rule*, FERC Docket No. RM18-1-000 (Oct. 23, 2017).

⁹⁸ Staff Report at 118. NERC has also classified the changing resource mix as a “high risk” issue for the electric grid. *See* N. AM. ELEC. RELIABILITY CORP., STATE OF RELIABILITY 2017 7 (June 2017), *available at* https://www.nerc.com/pa/RAPA/PA/Performance%20Analysis%20DL/SOR_2017_MASTER_20170613.pdf.

⁹⁹ PJM INTERCONNECTION, ANALYSIS OF OPERATIONAL EVENTS AND MKT. IMPACTS DURING THE JAN. 2014 COLD WEATHER EVENTS 4 (May 8, 2014), <http://www.pjm.com/~media/library/reports-notice/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-cold-weather-events.ashx>.

¹⁰⁰ *Id.* at 26.

¹⁰¹ Secretary NOPR Letter at 3.

¹⁰² Staff Report at 95.

¹⁰³ Secretary NOPR Letter at 3.

and coal-fired plants out-performed natural gas plants during this period by a significant margin.¹⁰⁴ For example, on the morning of Friday, January 5, 2018, nuclear and coal-fired generators were running at 135% and 111% of their committed capacity in PJM's 2017-2018 capacity auction, whereas natural gas plants were running at merely 45% of their committed capacity.¹⁰⁵ In fact, while over 64,000 MW of gas-fired generation cleared in the 2017-2018 capacity auction, only approximately 29,000 MW were running that morning.¹⁰⁶ As the recent NETL Report on the cold weather event concluded, demand in PJM "could not have been met without coal."¹⁰⁷ These facts are quite telling, as much of this difference can be attributed to natural gas price spikes and supply interruptions.¹⁰⁸ While the PJM grid has not experienced load-shedding, thanks to lower electric demand over the holiday season and the performance of nuclear and coal-fired generators, this may not be the case during future extreme weather events if the trend of nuclear and coal-fired plant closures continues.¹⁰⁹

¹⁰⁴ See PJM COLD SNAP PERFORMANCE 2018 at 13 & fig.10 (showing that nuclear and coal-fired generation combined constituted 63% of the online fuel mix during the 2018 cold snap, while natural gas-fired generation constituted 22%).

¹⁰⁵ See *Data Miner 2*, PJM, <http://www.pjm.com/markets-and-operations/etools/data-miner-2.aspx> (when filtered to Generation by Fuel Type for 8 a.m. on January 5, 2018, showing nuclear and coal-fired output of 35,543 MW and 50,254.8 MW, respectively); *Commitments by Fuel Type & Delivery Year 2007/08 - 2019/20*, PJM, <http://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/rpm-commitment-by-fuel-type-by-dy.aspx?la=en> (last visited Mar. 22, 2018) (showing cleared UCAP for 2017-2018 planning year of 26,401 MW for nuclear generation and 45,354 MW for coal-fired generation).

¹⁰⁶ See *Data Miner 2*, PJM, <http://www.pjm.com/markets-and-operations/etools/data-miner-2.aspx>, (when filtered to Generation by Fuel Type for 8 a.m. on January 5, 2018, showing gas output of 28,624.3 MW); *Commitments by Fuel Type & Delivery Year 2007/08 - 2019/20*, PJM, <http://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/rpm-commitment-by-fuel-type-by-dy.aspx?la=en> (last visited Mar. 22, 2018) (showing cleared UCAP for 2017-2018 planning year of 64,089 MW for gas-fired generation); see also PJM COLD SNAP PERFORMANCE 2018 at fig.11.

¹⁰⁷ NETL Report at 17.

¹⁰⁸ Operational flow orders (restrictions/limitations placed on gas consumption by pipeline operators) have been in place on numerous natural gas pipelines throughout PJM since late December 2017, including Transco, Texas Eastern, Dominion, and Columbia. See Transco Pipeline, *Critical Notices*, <http://www.1line.williams.com/Transco/index.html> (last visited Mar. 22, 2018); Texas Eastern, *Critical Notices*, <https://infopost.spectraenergy.com/infopost/> (last visited Mar. 22, 2018); Dominion, *Critical Notices*, http://dekaflow.dominionenergy.com/jsp/info_post.jsp?&company=dti (last visited Mar. 22, 2018); Columbia Gas Transmission, *Critical Notices*, <http://www.columbiapipeinfo.com/cpginfopost/> (last visited Mar. 22, 2018). See also NETL Report at 14 ("[N]atural gas in PJM spiked from a normal level near \$3/MMBtu to \$96/MMBtu at the Texas Eastern M3 interface, in Southeastern PA, at the [bomb cyclone] peak on January 5.").

¹⁰⁹ NETL Report at 18 ("To maintain the resilience seen in this event, any retiring units that were dispatched during the event would have to be replaced with other resilient generation sources and their associated infrastructure (e.g. pipelines, transmission). Due to the timeframe required for permitting, development, and construction, these projects must be well underway prior to potential unit retirements to ensure their availability.").

June 2017 Yorktown Un-Retirement: The Department of Energy issued a Section 202(c) order to force Dominion Energy to keep its Yorktown coal-fired units in PJM online to address future reliability needs.¹¹⁰

System Design Changes: The bulk power system is undergoing a rapid transformation and the impacts of this change are not being fully studied or understood. The system is moving from one that was driven by sound engineering practices and multiple redundancies to a system using an economic model with no consideration for system needs. The North American Electric Reliability Corporation (“NERC”) has noted that the “changing resource mix is altering the operating characteristics of the bulk power system.”¹¹¹ NERC warned that these changes must be “properly managed in order to assure continued reliability and ensure resiliency.”¹¹²

Pipeline Vulnerabilities: A report published by Quanta Technology noted high levels of vulnerability in PJM from a shortfall of pipeline capacity supplying the Atlantic coast, a shortfall of pipeline capacity to access storage and production, disruptions in supply or storage during winter peak season, and a lack of firm gas supply contracts.¹¹³

Future Price Volatility: A recent report by IHS Energy states that the current diversified portfolio of the U.S. power supply lowers the cost of generating electricity by more than \$93 billion per year compared to a less diverse case with no meaningful contributions from nuclear and coal-fired generation.¹¹⁴ As such key baseload plants continue to retire, price volatility is expected to rise as the system becomes more reliant on a single fuel source.¹¹⁵ Dr. Hunger similarly concluded that, “[w]hen resources retire, [market] prices can fluctuate in an unpredictable manner.”¹¹⁶

Baseload Plant Closures: In the past four years, over 11,000 MW of coal-fired generation has closed in PJM, the equivalent of a dozen large power plants.¹¹⁷ Many of these plants were

¹¹⁰ Order No. 202-17-2 (Dep’t of Energy June 16, 2017), *reh’g dismissed sub nom.* Order No. 202-17-5 (Sep. 15, 2017). *See also* Order No. 202-17-4 (Dep’t of Energy Sep. 14, 2017) (renewing initial order), *reh’g dismissed sub nom.* Order No. 202-18-1 (Nov. 6, 2017); Order No. 202-18-2 (Dep’t of Energy Dec. 13, 2017) (further renewing order).

¹¹¹ Letter from Gerry Cauley, President and CEO, NERC, to Rick Perry, U.S. Sec’y of Energy, Attachment (“Synopsis of NERC Reliability Assessments”) at 1 (May 9, 2017), *available at* <https://www.nerc.com/news/Headlines%20DL/DOE%20Grid%20Study%20Comments%2012OCT17.pdf>.

¹¹² *Id.*

¹¹³ HENRY CHAO, COMMENTS OF QUANTA TECHNOLOGY ON PJM’S EVOLVING RESOURCE MIX AND SYSTEM RELIABILITY 11 (May 17, 2017), *available at* http://quanta-technology.com/sites/default/files/QuantaTechnology_Comments_on_PJM%20Whitepaper.pdf.

¹¹⁴ IHS ENERGY, THE VALUE OF US POWER SUPPLY DIVERSITY at 5.

¹¹⁵ *See id.* at 9-10.

¹¹⁶ Hunger Aff. at 33.

¹¹⁷ 2017 PJM Report at 544 tbl.12-5 (listing coal unit retirements of 2,239 MW, 7,064.8 MW, 243 MW, and 2,038 MW in 2014, 2015, 2016, and 2017, respectively).

operating during the 2014 Polar Vortex and are no longer available to run in the event of system stress.

Problems Associated with Location of Replacement Resources: Generation resources used to replace retiring plants are frequently located far away from the location of the retiring generation, which poses multiple problems. First, as Dr. Hunger states, this “may cause temporary or persistent congestion, increasing uncertainty related to locational pricing, a primary signal against which generation investment or retirement decisions need to be made.”¹¹⁸ Second, significant new transmission infrastructure may need to be constructed. For example, approximately \$1 billion of new transmission infrastructure was needed to maintain reliability after closure of certain generating units in northern Ohio in 2014 and 2015.¹¹⁹

Additional Plant Closures: Numerous baseload plants in PJM have announced that they are financially challenged and are closing or contemplating closure. If action is not taken, thousands of additional megawatts of reliable baseload power will retire in the next several years, leaving PJM without fuel-secure baseload resources.¹²⁰

- It is a matter of public record that FirstEnergy Solutions, which through Applicants indirectly owns 12,300 MW of generation, likely will file for bankruptcy by the end of March 2018.¹²¹ Multiple plants are at risk for permanent closure as a result of this expected action.
- FirstEnergy Solutions submitted notices to PJM on March 28, 2018, that it would deactivate its three nuclear plants, Davis-Besse (908 MW), Perry (1,268 MW), and Beaver Valley (1,872 MW), by 2021.

¹¹⁸ Hunger Aff. at 33.

¹¹⁹ Direct Testimony of Gavin Cunningham at 3, Application of Ohio Edison et al., Pub. Util. Com’n of Ohio No. 14-1297-EL-SSO (Aug. 4, 2014).

¹²⁰ In addition to the closures listed, Dominion submitted deactivation requests in January 2018 for four coal-fired units with capacity totaling approximately 400 MW. PJM FUTURE DEACTIVATIONS (Dec. 29, 2017), <http://www.pjm.com/-/media/planning/gen-retire/pending-deactivation-requests.ashx?la=en> (“PJM FUTURE DEACTIVATIONS”). These units were placed in “cold reserve”—meaning they could be restarted if necessary—based on a number of factors including the cost of solar and wind generation and the abundance of natural gas. Sarah Rankin, *Dominion to Eliminate Nearly 400 Positions After Review of Power Generation Group*, RICHMOND TIMES-DISPATCH (Jan. 17, 2018), http://www.richmond.com/news/virginia/dominion-to-eliminate-nearly-positions-after-review-of-power-generation/article_60633a02-01d5-50a8-befc-f2ccf04b8fb5.html.

¹²¹ Gavin Bade, *FirstEnergy CEO Says Generation Subsidiary Headed for Bankruptcy Protection*, UTILITY DIVE (Feb. 23, 2018), <https://www.utilitydive.com/news/firstenergy-ceo-says-generation-subsidiary-headed-for-bankruptcy-protection/517743/>; Jeffrey Ryser, *FirstEnergy continues Push Away from Competitive Generation Subsidiary*, PLATTS MEGAWATT DAILY (Feb. 22, 2018).

- FirstEnergy Corp. announced that Units 5–7 at the W.H. Sammis coal-fired plant (1,490 MW) are in danger of being closed. The company previously announced that Units 1–4 (720 MW) will close by May 2020.¹²²
- FirstEnergy Corp. has announced that the 2,510 MW Bruce Mansfield coal-fired plant is at risk of closure due to the exposure to changing market conditions.¹²³
- Allegheny Energy Supply Company, LLC, a FirstEnergy Corp. subsidiary, recently submitted a deactivation notice for Pleasants Power Station, a 1,300 MW coal-fired plant in West Virginia.¹²⁴
- Dayton Power & Light has announced the closure by June 2018 of the J.M. Stuart coal-fired plant (2,318 MW) and the Killen Station Unit 2 coal-fired plant (600 MW), citing market conditions making the plants not economically viable.¹²⁵ Stuart Unit 1 was closed even earlier, on September 30, 2017.¹²⁶
- Owners of the 1,884 MW Homer City coal-fired power plant attempted to sell the plant in 2016, but were unable to find a buyer; Standard & Poor's analysts cite lower power prices and increasing expenses as driving forces behind the facility's ills.¹²⁷
- Westmoreland Partners recently announced the sale or closure of the 209 MW Roanoke Valley coal-fired power plant.¹²⁸ As anticipated, on March 1, 2017, these units retired.¹²⁹

¹²² *FirstEnergy to Deactivate Units at Two Ohio Power Plants*, FIRSTENERGY (July 22, 2016), https://www.firstenergycorp.com/content/fecorp/newsroom/news_articles/firstenergy-to-deactivate-units-at-two-ohio-power-plants-.html; PJM FUTURE DEACTIVATIONS.

¹²³ Tom Henry, *FirstEnergy Exec Calls for 'Urgent' Aid*, TOLEDO BLADE (Mar. 25, 2017), <http://www.toledoblade.com/Energy/2017/03/25/FirstEnergy-exec-calls-for-urgent-aid.html>.

¹²⁴ *Id.* In addition, during the first quarter of 2018, FirstEnergy Corp. took a \$120 million pre-tax impairment charge on the value of the Pleasants Power Station. FirstEnergy Corp., Annual Report (Form 10-K) at 4 (Feb. 20, 2018).

¹²⁵ See Wendy Mitchell, *DP&L Determined to Close J.M. Stuart and Killen Power Plants*, THE LEDGER INDEP. (Mar. 20, 2017), http://www.maysville-online.com/news/local/dp-l-determined-to-close-j-m-stuart-and-killen/article_99f244cf-b832-5477-aa8b-831b8fe796be.html; PJM, FUTURE DEACTIVATIONS.

¹²⁶ *PJM Generator Deactivations*, PJM (Dec. 18, 2017), <http://www.pjm.com/-/media/planning/gen-iretire/generator-deactivations.ashx?la=en> ("PJM DEACTIVATIONS").

¹²⁷ Anya Litvak, *Homer City Gets Bids But No Deals*, PITTSBURGH POST-GAZETTE (Sept. 14, 2016), <http://powersource.post-gazette.com/powersource/companies/2016/09/14/Homer-City-gets-some-bids-but-no-deals/stories/201609110096>.

¹²⁸ John Dixon, *Weldon Power Plant Closing*, THE DAILY HERALD (Roanoke) (Mar. 10, 2017), http://www.rrdailyherald.com/news/local/weldon-power-plant-closing/article_6a9f1208-0511-11e7-a204-b762cd148f4a.html.

¹²⁹ PJM DEACTIVATIONS.

- Exelon has announced that it will close the Oyster Creek nuclear plant (608 MW) in October 2018—a decade before the end of its operating license—citing negative economic factors.¹³⁰
- Exelon has announced the premature closure of the 837 MW Three Mile Island nuclear power plant in September 2019, citing deteriorating economic value.¹³¹

C. The Emergency in Nuclear and Coal-Fired Generation Threatens Generation Diversity, Resiliency, Dependability, and Electric Security in PJM

A recent PJM report noted that the system was able to maintain operational reliability with a system comprised of 86 percent natural gas-fired generation, however the report did not fully capture risks associated with gas deliverability.¹³² PJM itself admits to this issue, stating, “We found that the risk to the system wasn’t that resources couldn’t necessarily provide reliability attributes but that the potential concentration of a single fuel source or low-probability, high-impact events could cause significant impacts to the system.”¹³³

Without baseload nuclear and coal-fired generation, the United States is taking the most sophisticated and redundant bulk electric system in the world and putting it on top of an unsophisticated bulk gas system that lacks the same level of redundancy, creating additional security risks. An electric system that is not resilient to high-impact events is not a reliable system, and is one that threatens the national security of the United States. In short, the continued retirement of nuclear and coal-fired generating facilities in PJM has resulted in an emergency situation that has placed the continuing security of PJM at risk. As you noted in your September 28, 2017 letter to FERC, “the resiliency of the electric grid is threatened by the premature retirement of these fuel-secure traditional baseload resources.”¹³⁴

¹³⁰ See Press Release, Exelon, Exelon to Retire Oyster Creek Generating Station in 2019 (Dec. 8, 2010), http://www.exeloncorp.com/newsroom/Pages/pr_20101208_Nuclear_OysterCreekRetirement.aspx; Robert Walton, *Exelon to Close Oyster Creek Nuke in October, a Year Early*, UTILITY DIVE (Feb. 2, 2018), <https://www.utilitydive.com/news/exelon-to-close-oyster-creek-nuke-in-october-a-year-early/516236/>; PJM FUTURE DEACTIVATIONS.

¹³¹ See Press Release, Exelon, Exelon to Retire Three Mile Island Generating Station in 2019 (May 30, 2017), <http://www.exeloncorp.com/newsroom/exelon-to-retire-three-mile-island-generating-station-in-2019>; PJM FUTURE DEACTIVATIONS.

¹³² PJM INTERCONNECTION, PJM’S EVOLVING RESOURCE MIX AND SYSTEM RELIABILITY 5 (Mar. 30, 2017) (“[A]dditional risks, such as gas deliverability during polar vortex-type conditions and uncertainties associated with economics and public policy, were not fully captured in this analysis.”), <http://www.pjm.com/~media/library/reports-notice/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx>.

¹³³ Press Release, PJM, PJM Study: System Reliable Even with Much More Gas, Renewables; Resilience Key to Operational Reliability (Mar. 30, 2017) (emphasis added) (quoting Michael Bryson, PJM Vice President of Operations), <http://www.pjm.com/~media/about-pjm/newsroom/2017-releases/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx>.

¹³⁴ Secretary NOPR Letter at 1.

PJM itself has recognized the need for resiliency, finding that, “[i]n addition to delivering energy services reliably during strained system conditions, to which probabilities can be attached (e.g., plant outages, weather variability), a resilient energy system also must be resistant to larger scale shocks to which it is difficult to attach probabilities”¹³⁵ PJM recently concluded that “reliability attributes supplied through generation and other resources . . . support reliability” and “the maintenance or assurance of these attributes into the future are important to resilience mitigation.”¹³⁶ Fuel diversity and security are key components of a resilient grid. PJM acknowledged the connection between diversity and resiliency when it committed to “analyz[ing] future trends in resource mix and their impacts on both reliability and resilience.”¹³⁷ As PJM’s market monitor stated, “[s]ignificant reliance on specific fuels, including nuclear, coal and gas means that markets are at risk from a significant disruption in any one fuel.”¹³⁸

NERC goes further, recognizing not only the importance of fuel diversity in maintaining a resilient energy system,¹³⁹ but also the critical contributions of nuclear and coal-fired resources to mitigating risks to the electric grid.¹⁴⁰ Overreliance on natural gas, by contrast, *increases* risk to the electric grid because, as NERC states, “within a relatively short time, a major failure” in the natural gas transmission system “could result in a loss of electric generating capacity that could exceed the electric reserves available to compensate for these losses.”¹⁴¹ As explained by Dr. Henry Chao, Executive Advisor and Vice President at Quanta Technology and former Vice President at New York Independent System Operator (“NYISO”): “Abundant supplies of natural gas provide many advantages to electric consumers, but . . . natural gas delivery systems lack the reliability and redundancy of the bulk electric system. Specifically, there are no systematic reliability criteria for natural gas delivery system planning and operations; whereas the electric power industry has mandatory reliability standards that are developed and enforced by NERC.”¹⁴²

¹³⁵ PJM INTERCONNECTION, PJM’S EVOLVING RESOURCE MIX AND SYSTEM RELIABILITY 33 (Mar. 30, 2017).

¹³⁶ PJM Comments at 46.

¹³⁷ *Id.*

¹³⁸ 2017 PJM Report at 5.

¹³⁹ N. AM. ELEC. RELIABILITY CORP., SYNOPSIS OF NERC RELIABILITY ASSESSMENTS: THE CHANGING RES. MIX AND THE IMPACTS OF CONVENTIONAL GENERATION RETIREMENTS 4 (May 9, 2017) (“Fuel diversity provides a fundamental benefit of increased resilience. . . . Areas with limited fuel and/or limited resource diversity may be challenged and should increase their attention to resiliency planning”).

¹⁴⁰ *Id.* (“Coal and nuclear resources, by design, are designed for low cost O&M and continuous operation. However, it is not the economics nor the fuel type that make these resources attractive from a reliability perspective. Rather, these conventional steam-driven generation resources have low forced and maintenance outage hours traditionally and have low exposure to fuel supply chain issues.”); *id.* at 2 (“Coal-fired and nuclear generation have the added benefits of high availability rates, low forced outages, and secured on-site fuel. Many months of on-site fuel allow these units to operate in a manner independent of supply chain disruptions.”).

¹⁴¹ N. AM. ELEC. RELIABILITY CORP., 2013 SPECIAL RELIABILITY ASSESSMENT: ACCOMMODATING AN INCREASED DEPENDENCE ON NATURAL GAS FOR ELECTRIC POWER; PHASE II: A VULNERABILITY AND SCENARIO ASSESSMENT FOR THE NORTH AMERICAN BULK POWER SYSTEM 3-4 (MAY 2013).

¹⁴² FirstEnergy Comments, Ex. 6 (“Chao Aff.”) at 11, *Grid Resiliency Pricing Rule*, FERC Docket No. RM18-1-000 (Oct. 23, 2017).

Unless immediate action is taken, the continued retirement of nuclear and coal-fired generating units—by breeding greater dependence on generation fueled by natural gas, which is subject to supply disruptions, constrained pipeline capacity, a general inability to store fuel on-site, and competing demand from consumer heating in winter months—will increasingly result in significant, negative outcomes for the approximately 65 million people living and working within the PJM footprint. These harmful consequences include increased electric price volatility, lessened grid resilience and dependability, uncertain electric security in the future, decreased economic stability, and severe job losses—especially in the coal sector—as both power plants and fuel suppliers declare bankruptcy and cease operations. Combined, these conditions are potentially disastrous for the electric grid and the economy. PJM itself recently found that as the “resource mix moves in the direction of less coal and nuclear generation, generator reliability attributes of frequency response, reactive capability and fuel assurance decrease. . . .”¹⁴³

This is not idle speculation. As illustrated over the period of extreme cold in the eastern U.S. from December 27, 2017, through January 8, 2018, PJM was able to maintain reliability on its system in large part due to the strong performance from nuclear and coal-fired generators—performance that well exceeded those plants’ commitments in PJM’s capacity auction. In contrast, natural gas-fired plants were operating well below expected levels. Without these fuel-secure baseload generating resources, many of which are facing imminent retirement, the outcome may have been much different. And with temperatures well below freezing throughout virtually all of PJM during this time, a different outcome could have been catastrophic to public health and safety.

The challenges are not limited to just PJM, but are rampant in competitive electric markets throughout the Nation. While traditional vertically integrated utilities continue to provide safe, reliable, and affordable electric generation service every day, areas with RTO markets face problems resulting from the failure to recognize the importance of fuel security and fuel diversity. These incidents provide insight into vulnerabilities potentially facing PJM:

February 26, 2008 Wind Decrease in ERCOT: An unexpected drop in wind generation coupled with a demand increase from cold weather caused ERCOT to have to cut service to large industrial customers.¹⁴⁴ ERCOT had 10 minutes to curtail nearly three percent of the system load to avoid blackouts.¹⁴⁵

¹⁴³ PJM INTERCONNECTION, PJM’S EVOLVING RES. MIX AND SYSTEM RELIABILITY 5 (Mar. 30, 2017).

¹⁴⁴ Eileen O’Grady, *Loss of Wind Causes Texas Power Grid Emergency*, REUTERS (Feb. 27, 2008), <http://www.reuters.com/article/us-utilities-ercot-wind-idUSN27495229200802287feedType=RSS&feedName=domesticNews&rpc=22&sp=true>; E. ELA & B. KIRBY, NAT’L RENEWABLE ENERGY LAB., ERCOT EVENT ON FEBRUARY 26, 2008: LESSONS LEARNED (July 2008), <http://www.nrel.gov/docs/fy08osti/43373.pdf>.

¹⁴⁵ See Eileen O’Grady, *Loss of Wind Causes Texas Power Grid Emergency*, REUTERS (Feb. 27, 2008), <http://www.reuters.com/article/us-utilities-ercot-wind-idUSN27495229200802287feedType=RSS&feedName=domesticNews&rpc=22&sp=true>.

February 2011 Cold Weather in ERCOT: Rolling blackouts affected 3.2 million customers and, had ERCOT not shed load, a widespread, uncontrolled blackout would have occurred.¹⁴⁶

New England ISO Winter Reliability Program: Since 2014, the New England Independent System Operator Inc. ("ISO New England") has had to establish winter reliability programs in an attempt to ensure continued operation of natural gas-fired generators during periods of cold weather.¹⁴⁷ Pipeline capacity issues, first identified in 2004, remain issues today and have yet to be solved by the competitive marketplace.¹⁴⁸ As ISO New England recently noted, "[i]n New England, the most significant resilience challenge is fuel security—or the assurance that power plants will have or be able to obtain the fuel they need to run, particularly in winter—especially against the backdrop of coal, oil, and nuclear unit retirements, constrained fuel infrastructure, and the difficulty in permitting and operating dual-fuel generating capability."¹⁴⁹ ISO New England thus concluded that "while New England is meeting its resource adequacy requirements for capacity—which are based on expected summer peak demands—with the market mechanisms that are in place today, from an energy availability standpoint, the shift from generators with on-site fuel to generators relying on 'just-in-time' fuel delivery is challenging the system's adequacy and, therefore, its resilience, particularly during winter peak demands."¹⁵⁰ Indeed, in nearly all of the fuel mix scenarios studied by ISO New England, there would be "[e]nergy shortfalls due to inadequate fuel . . . requiring frequent use of emergency actions to keep power flowing and protect the grid."¹⁵¹ These emergency actions could include rolling blackouts.¹⁵²

2016-2017 Aliso Canyon in CAISO: A leak at the Aliso Canyon natural gas storage facility was discovered in October 2015, causing the facility to close to subsequent injections until July 2017.¹⁵³ Although Aliso Canyon continues to operate, the California Public Utilities Commission

¹⁴⁶ FEDERAL ENERGY REGULATORY COMM'N & N. AM. ELEC. RELIABILITY CORP., REPORT ON OUTAGES AND CURTAILMENTS DURING THE SOUTHWEST COLD WEATHER EVENT OF FEBRUARY 1-5, 2011 1 (2011).

¹⁴⁷ Press Release, ISO New England, Winter 2015/2016: Sufficient Power Supplies Expected to Be Available (Dec. 1, 2015), available at https://www.iso-ne.com/static-assets/documents/2015/12/20151201_winter_outlook_release_final.pdf.

¹⁴⁸ Peter Brandien, Vice President, Operations, ISO New England, Panel Discussion Remarks at 1, *Winter 2016-2017 Operations and Market Performance in Regional Transmission Orgs. and Indep. Sys. Ops.*, FERC Docket No. AD16-24-000 (Oct. 20, 2016).

¹⁴⁹ ISO New England, Response of ISO New England at 1, *Grid Resilience in Regional Transmission Organizations and Independent System Operators*, FERC Docket No. AD18-7-000 (Mar. 9, 2018).

¹⁵⁰ *Id.* at 8.

¹⁵¹ *Id.*, Attachment A at 4-5.

¹⁵² *Id.* In contrast to PJM, which is looking to FERC for guidance and direction, ISO New England is taking initiative and studying fuel security issues. *Id.* at 26.

¹⁵³ Rob Nikolewski, *Utility Resumes Injections at Aliso Canyon, Site of Massive Gas Leak*, SAN DIEGO UNION-TRIBUNE (Aug. 1, 2017), <http://www.sandiegouniontribune.com/business/sd-fi-aliso-reinjections-20170801-story.html>.

has opened a proceeding “to determine the feasibility of minimizing or eliminating the use of [the facility]”¹⁵⁴ and legislation was introduced to shut down the facility.¹⁵⁵

May 3, 2017 CAISO Emergency: Normal system operations quickly turned into an emergency when energy imports failed to materialize.¹⁵⁶ The impacts were heightened as the daily rapid decline of solar power occurred as evening approached.¹⁵⁷ The California Independent System Operator Inc. (“CAISO”) had minutes to deploy emergency reserves and quickly went from normal system operations to a Stage 1 Emergency.¹⁵⁸

Natural Gas Plant Bankruptcies: In 2016, two large natural gas-fired plants in California, totaling 1,778 MW, declared bankruptcy because they could not make sufficient revenues in the CAISO wholesale markets.¹⁵⁹ In 2017, Panda Temple Power’s 758 MW natural gas plant in Texas filed for bankruptcy.¹⁶⁰ GenOn Energy, with over 9,000 MW of gas-fired generation, filed for bankruptcy in 2017 as well,¹⁶¹ and recently announced the retirement of three gas-fired power plants located in Southern California due to “economic reasons.”¹⁶²

D. Emergency Action by the Secretary Is Required

Although FERC complied with the directive of the Secretary pursuant to Section 403 of the DOE Organization Act in issuing a Notice of Proposed Rulemaking addressing these issues,¹⁶³ it has failed to undertake any action that will stem the tide of plant closures and thus prevent the impending crisis. You yourself said that “it is [FERC’s] immediate responsibility to take action

¹⁵⁴ CAL. PUB. UTILS. COMM’N, *Aliso Canyon Well Failure Order Instituting Investigation*, <http://www.cpuc.ca.gov/AlisoOII/> (last visited Mar. 22, 2018).

¹⁵⁵ Chris Megerian, *Proposal Would Close Aliso Canyon—But Not for A Decade*, L.A. TIMES (Sept. 14, 2017), <http://www.latimes.com/politics/essential/la-pol-ca-essential-politics-updates-aliso-canyon-leak-1505427333-htmlstory.html>.

¹⁵⁶ Jason Fordney, *California Grid Emergency Comes Days After Reliability Warning*, RTO INSIDER (May 8, 2017).

¹⁵⁷ *Id.*

¹⁵⁸ *Id.*

¹⁵⁹ Herman K. Trabish, *As Gas Plants Struggle, California Seeks New Flexible Capacity Strategies*, UTILITY DIVE (June 27, 2017), <http://www.utilitydive.com/news/as-gas-plants-struggle-california-seeks-new-flexible-capacity-strategies/445760/>.

¹⁶⁰ *Id.*; Cody Weems, *Panda Temple I Plant Files for Chapter 11 Bankruptcy*, TEMPLE DAILY TELEGRAM (May 11, 2017), http://www.tdtnews.com/news/article_efa76536-36a3-11e7-8b73-034537689093.html.

¹⁶¹ Herman K. Trabish, *As Gas Plants Struggle, California Seeks New Flexible Capacity Strategies*, UTILITY DIVE (June 27, 2017), <http://www.utilitydive.com/news/as-gas-plants-struggle-california-seeks-new-flexible-capacity-strategies/445760/>; see also Andrew Scuria & Patrick Fitzgerald, *GenOn Energy Files for Chapter 11 Bankruptcy Protection*, WALL ST. J. (June 14, 2017), <https://www.wsj.com/articles/genon-energy-files-for-chapter-11-bankruptcy-protection-1497445051>.

¹⁶² Samantha Masunaga, *NRG Subsidiary to Close Three Power Plants in Southern California*, L.A. TIMES (Mar. 9, 2018), <http://www.latimes.com/business/la-fi-nrg-plants-20180309-story.html>.

¹⁶³ Grid Resiliency Pricing Rule, 82 Fed. Reg. 46,940 (Oct. 10, 2017).

to ensure that generation resources with on-site fuel supplies and the ability to provide essential energy and ancillary reliability services including voltage support, frequency services, operating reserves, and reactive power are fully valued. . . .¹⁶⁴ But FERC failed to do so and there is no indication that meaningful and substantive action by FERC will come in time to stem the tide of plant closures.

The DOE correctly recognized that the “recent Polar Vortex, as well as the devastation from Superstorm Sandy and Hurricanes Harvey, Irma, and Maria, reinforces the urgency that [FERC] must act now.”¹⁶⁵ Further, as you observed, “over the past several years, [FERC] has developed an extensive record on price formation [issues] in [FERC] approved ISOs and RTOs.”¹⁶⁶ And, as you recently noted, “[t]he voluminous comments filed in the [FERC NOPR] proceeding provide substantial evidence of, and otherwise confirm, the threat to the nation’s electricity grid and the urgent need for [FERC] action to reform market rules to preserve fuel-secure generation resources.”¹⁶⁷ Despite the urgency and its extensive record, FERC has failed to take the action necessary to address the emergency in PJM.

As you correctly noted, “it is especially urgent to prevent premature retirements of the resources that have these critical [fuel-secure] attributes.”¹⁶⁸ As a result of FERC’s and the RTOs’ failure to address this crisis, swift and decisive action is needed *now* to address this imminent loss of nuclear and coal-fired baseload generation and the threat to the electric grid that this loss poses. The Secretary needs to immediately issue an emergency order, pursuant to his authority under section 202(c) of the Federal Power Act, 16 U.S.C. § 824a(c), to ensure that baseload nuclear and coal-fired generators in PJM do not retire prematurely and are fully compensated for the benefits and services that they provide, as more fully described in Section II.B above. The order should find that an emergency exists because of the recent and imminent critical reduction in nuclear and coal-fired generation capacity, which threatens generation diversity, resiliency, dependability, and electric security in PJM. As this winter’s events revealed, without the availability of these critical, fuel-secure plants during extreme weather events (which can happen at any time during the year—not just in the winter), the PJM grid will likely experience reliability issues.

E. Information Required by Section 205.373

Applicants provide below the information called for by Section 205.373 of DOE’s regulations.¹⁶⁹ To be clear, Applicants’ request in this application applies to *all* eligible plants in

¹⁶⁴ Secretary Extension Letter at 1.

¹⁶⁵ Dep’t of Energy, Notice of Proposed Rulemaking to FERC at 11 (Sept. 28, 2017).

¹⁶⁶ Secretary NOPR Letter at 6.

¹⁶⁷ Secretary Extension Letter at 1.

¹⁶⁸ Secretary NOPR Letter at 1.

¹⁶⁹ 10 C.F.R. § 205.373. Certain elements of Section 205.373 address the circumstances of an applicant facing a shortage of real power and the prospect of firm customer curtailment, but do not address the emergency circumstances described herein, which involve a threat to the system more broadly. Applicants have indicated where these requirements are not applicable to the circumstances at hand.

PJM, not just those that they themselves own and operate. However, at this time Applicants only possess the required information for their own plants. To address this fact, Applicants request that the Secretary require PJM to obtain such information immediately from all eligible generators and begin negotiating agreements for the continued operation and appropriate compensation of such units.

a) Legal name of applicants. The applicants are FirstEnergy Generation, LLC, FirstEnergy Nuclear Generation, LLC, FirstEnergy Nuclear Operating Company, and FirstEnergy Generation Mansfield Unit 1 Corp. This application refers to these entities, collectively, as "Applicants."

b) Person to whom correspondence should be addressed. Correspondence with respect to this application should be directed to the following persons:

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c) Political subdivisions in which applicants operate and conduct business. Applicants own and operate certain nuclear and coal-fired generation assets, and provide energy-related products and services to retail and wholesale customers, in the states of Ohio and Pennsylvania.

d) Baseline data.

1) Daily peak load and energy requirements for each of the past 30 days, and projections for each day of the Emergency Period. These requirements are not applicable to Applicants' request, which contemplates relief on a broad scale. Nonetheless, Applicants provide as Attachment B a chart showing the monthly output of nuclear and coal-fired generation in PJM for the period 2012 through 2017.

2) All capacity and energy receipts or deliveries to other electric utilities for each of the past 30 days. Applicants respectfully submit that such information is not applicable to the present application.

3) The status of all interruptible customers for each of the past 30 days, and anticipated status during the Emergency Period. Applicants respectfully submit that such information is not applicable to the present application. Applicants are requesting emergency relief to *avoid* the interruption of power supply to the 65 million customers in the PJM footprint.

- 4) All scheduled capacity and energy receipts or deliveries to other electric utilities during the Emergency Period. Applicants respectfully submit that such information is not applicable to the present application.
- e) A description of the emergency situation, any contingency plan, and the current level of implementation. The emergency situation faced by PJM and consumers of electric energy within its footprint is described above in Section I and Section II.B. Applicants do not have any contingency plan to provide power to the PJM market and its 65 million customers absent an order of the Secretary in accordance with the emergency relief requested herein. As explained above, nuclear and coal-fired generating units in PJM are closing at an alarming rate, with efforts to “save” generation for energy security having failed. Implementation prior to the Secretary granting emergency relief is unworkable.
- f) A showing that adequate electric service to firm customers cannot be maintained without additional power transfers. As explained above, the recent and imminent shut-down of nuclear and coal-fired generating units in PJM puts at risk the ability to provide firm, reliable electric service within the PJM footprint without emergency action to maintain the operation of these generating facilities.
- g) A description of any conservation or load reduction actions that have been implemented. PJM has implemented limited demand response efforts in recent years,¹⁷⁰ but these efforts, and future similar ones, cannot come close to replacing the nuclear and coal-fired generation at risk of loss.
- h) A description of efforts made to obtain additional power through voluntary means and the results of such efforts. Applicants respectfully submit that such information is not applicable to the present application because it is the responsibility of PJM, not Applicants, to balance load and resources within the PJM footprint. PJM’s efforts to obtain additional power through voluntary means has been limited to market redesign efforts, such as Capacity Performance, which have failed to add sufficient fuel-secure generating capacity to the PJM market. Additionally, PJM is “fuel neutral” and has undertaken no effort to maintain nuclear and coal-fired generation, which provides fuel diversity and helps ensure sufficiency of supply during times of spiking demand such as that experienced this past winter.
- i) A listing of proposed sources and any amounts of power necessary from each source to alleviate the emergency and a listing of any other “entities” that may be directly affected by the requested order. See Attachment A for listing of nuclear and coal-fired generation facilities in PJM. Applicants submit that firm power supply agreements between PJM and the owners of each nuclear and coal-fired generating facility in PJM satisfying the criteria set forth in Section II.F are necessary to alleviate the emergency. Such generating facilities provide significant

¹⁷⁰ See *PJM Markets FAQ*, PJM, <https://learn.pjm.com/three-priorities/buying-and-selling-energy/markets-faqs.aspx> (last visited Mar. 22, 2018).

benefits to energy markets and the public at large, including fuel security and diversity, but receive no reliable cost support and, instead, must rely on PJM's power markets which fail to compensate these generators for the full value of the benefits that they provide.¹⁷¹

- j) Specific proposals to compensate the supplying "entities" for the emergency services requested and to compensate any transmitting "entities" for services necessary to deliver such power. Applicants propose that, as long as an emergency continues to exist, subject generators and PJM shall operate pursuant to contracts developed and agreed upon by the parties themselves. As explained below, in the event that PJM and the generators are unable to agree to the contractual terms within fifteen (15) days of the issuance of the order, then Applicants request that the Secretary step in and determine the just and reasonable compensation and conditions.
- k) A showing that, to the best of the applicant's knowledge, the requested relief will not unreasonably impair the reliability of any "entity" directly affected by the requested order to render adequate service to its customers. The relief requested by Applicants is to *secure* the reliability of every entity and customer located within PJM's boundaries; no entities are expected to be reasonably or unreasonably impaired by the requested relief. Indeed, the requested relief is designed to enhance the ability of the subject generators and PJM to serve customers.
- l) Description of the facilities to be used to transfer the requested emergency service to the applicant's system. In order to retain the electric generation necessary to prevent and alleviate the emergency, the Secretary's order pursuant to Section 202(c) should apply to nuclear and coal-fired generators located within the PJM footprint that have a supply of fuel on-site sufficient to allow twenty-five (25) days of operation at full output, that are substantially compliant with all applicable federal, state, and local environmental laws and regulations, and that do not recover any of their capital or operating costs through rates regulated by a duly authorized state regulatory authority, municipal government, or energy cooperative. Such generating facilities provide significant benefits to energy markets and the public at large, including fuel security and diversity, but receive no reliable cost support and, instead, must rely on PJM's power markets which fail to compensate these generators for the full value of the benefits that they provide. Attachment A provides a listing of all nuclear and coal-fired generation facilities in PJM but only some of these facilities will likely satisfy the above criteria.
- m) A general or key map on a scale not greater than 100 kilometers to the centimeter showing, in separate colors, the territory serviced by each "entity" named in the application; the location of the facilities to be used for the generation and

¹⁷¹ Although PJM's markets fail to adequately compensate nuclear and coal-fired generators for the benefits that they provide, a subset of these generators may nevertheless recover their costs plus an acceptable rate of return through other regulatory mechanisms.

transmission of the requested emergency service; and all connection points between systems. Insofar as this application seeks action by the Secretary regarding all eligible plants in PJM, the type of map specifically requested is not relevant to this application. Nonetheless, Applicants attach as Attachment C a map of the PJM territory, and as Attachment D a map of Applicants' nuclear and coal-fired generating facilities. In addition, attached as Attachment E is a map issued by the PJM Market Monitor showing actual and planned retirements generating units from 2011 through 2020.

- n) An estimate of the construction costs of any proposed temporary facilities and a statement estimating the expected operation and maintenance costs on an annualized basis. Applicants respectfully submit that such information is not applicable to the present application. Due to the nature of Applicants' requested relief, there are no anticipated construction costs, and annualized operation and maintenance costs will remain roughly the same for subject facilities.

F. Requested Order

Applicants respectfully request that DOE issue an emergency order directing (i) the subject baseload nuclear and coal-fired generators to enter into contracts and all necessary arrangements with PJM, on a plant-by-plant basis, to generate, deliver, interchange, and transmit electric energy, capacity, and ancillary services to maintain fuel diversity and grid dependability and resiliency within the PJM region and (ii) PJM to pay such qualifying generating facilities just and reasonable cost-based rates that provide for full cost recovery consistent with ratemaking standards and principles or as otherwise necessary to ensure continued operations. In addition, the order should direct PJM to begin negotiating immediately with such generators on the terms of such supply.

Applicants respectfully request that each baseload generator eligible to participate—nuclear and coal-fired generators located within the PJM footprint that have a supply of fuel on-site sufficient to allow twenty-five (25) days of operation at full output, that are substantially compliant with all applicable federal, state, and local environmental laws and regulations, and that do not recover any of their capital or operating costs through rates regulated by a duly authorized state regulatory authority, municipal government, or energy cooperative—be compensated with just and reasonable rates that provide for full recovery of its fully allocated costs and a fair return on equity. The compensable costs used to establish this amount shall include, but are not necessarily limited to, operating expenses, costs of capital and debt, and a fair return on equity and investment. Just and reasonable rates shall provide for (a) full cost recovery consistent with ratemaking standards and principles or (b) full recovery of all costs necessary to ensure continued operations.¹⁷² If PJM and the owners are unable to agree to the contractual terms within fifteen

¹⁷² Certain nuclear and coal-fired units have, for financial reporting purposes, impaired the generating asset values based on the expectation that market revenues would not be sufficient to provide a return of and on invested capital. The fact that these assets were impaired for financial reporting purposes does not change the amount that was invested in the plant nor does it relieve their owners from their obligations to bondholders. As a result, the traditional cost-of-service model needs to be modified to allow cost recovery based on pre-impairment asset

(15) days of the issuance of the order, then Applicants request that the Secretary step in and determine the just and reasonable compensation and conditions.

Applicants request that payments begin on the effective date of each contract, and service under the contracts begin no later than sixteen (16) days after the issuance of the Order. If no agreement as to terms has been reached by this time, then the payment that the eligible generators receive for such service will be subject to true-up based on the just and reasonable rate that is ultimately prescribed.

Applicants request that the order become effective immediately and that, at a minimum, the order should remain in effect for four (4) years from the date of issuance or until the Secretary determines that the emergency has ceased to exist because the PJM markets have been fixed to properly compensate these units for the resiliency and reliability benefits that they provide, whichever is later.¹⁷³ Further, because the eligible nuclear and coal-fired generators must continue to substantially comply with all applicable federal, state, and local environmental laws and regulations, the provision in Section 202(c) limiting the duration to a 90-day period is not applicable.¹⁷⁴

values or it needs to be modified to allow a return on equity on the post-impairment asset value with an additional allowance for recovery of maturing debt in addition to interest expense.

¹⁷³ The Secretary has very broad authority to order “temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy as in [his] judgment will best meet the emergency and serve the public interest.” 16 U.S.C. § 824a(c)(1). As prior 202(c) orders reflect, “temporary” emergencies may vary greatly in length and may even be open ended. Indeed, in *Cross-Sound Cable*, the Secretary initially issued an order with a duration from August 14, 2003 until September 1, 2003, but later extended the order “until such time as the emergency identified in this order cease[d] to exist” Order No. 202-03-2 (Dep’t of Energy Aug. 28, 2003). In addition, the Secretary’s initial order to Mirant Corporation in 2005 lasted nearly 10 months. Order No. 202-05-3, *D.C. Pub. Serv. Comm’n*, Docket No. EO-05-01, at 10 (Dep’t of Energy Dec. 20, 2005).

¹⁷⁴ See 16 U.S.C. § 824a(c)(4)(A) (limiting the duration of a Section 202(c) order to 90 days if such order “may result in a conflict with a requirement of any Federal, State, or local environmental law or regulation”).

III. CONCLUSION

The time for talk is over. We find ourselves at a crisis point where significant baseload generation will cease to exist in RTO markets without quick and decisive intervention. Baseload generation does not have the luxury of time; the personal health and safety, economic development, jobs and livelihood of the communities where they are located, as well as our national security, hang in the balance.

It would also be a grave mistake to assume that there is no immediate emergency requiring immediate action now that winter is over. Premature nuclear and coal-fired plant closures know no season—as the announcement yesterday that FirstEnergy Solutions will deactivate over 4,000 MW of nuclear generation shows. The resilience and security of the electric grid can be jeopardized at any moment by any high-impact event—not just those that are weather driven. The health, safety, and welfare of the Nation, as well as our economic and physical well-being must be protected at all times from all potential threats to our electric grid.

As explained herein, Applicants respectfully request that the Secretary utilize the authority granted to DOE under Section 202(c) of the Federal Power Act and immediately issue the emergency order described above. Such quick and decisive intervention is necessary to avoid a crisis point where such baseload generation will cease to exist in RTO markets, and to ensure that nuclear and coal-fired generators operating within PJM are compensated fairly for their costs and the benefits that they provide such that they can continue to operate and ensure a dependable, affordable, safe, secure, and clean supply of electricity.

Respectfully submitted,

/s/ Rick C. Giannantonio

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Counsel for Applicants

cc: Bruce J. Walker, Assistant Secretary, DOE Office of Elec. Delivery & Energy Reliability
Patricia A. Hoffman, Principal Deputy Assistant Secretary, DOE Office of Elec. Delivery & Energy Reliability

Attachments

CERTIFICATE OF SERVICE

I hereby certify that, in accordance with 10 C.F.R. § 205.372, I have or will shortly cause copies of the foregoing documents to be served on the parties listed below by causing copies of the same to be sent via overnight delivery.

Federal Energy Regulatory Commission
Delaware Public Service Commission
Illinois Commerce Commission
Indiana Utility Regulatory Commission
Kentucky Public Service Commission
Maryland Public Service Commission
Michigan Public Service Commission
State of New Jersey Board of Public Utilities
North Carolina Utilities Commission
Public Utilities Commission of Ohio
Pennsylvania Public Utilities Commission
Tennessee Public Utility Commissions
Commonwealth of Virginia State Corporation Commission
Public Service Commission of West Virginia
New York Public Service Commission
Public Service Commission of the District of Columbia
PJM Interconnection
ReliabilityFirst Corp.
SERC Reliability Corporation
AES Warrior Run
Avon Lake
B L England
Beaver Valley
Birchwood Power
Braidwood Generation Station
Brandon Shores
Brunner Island
Byron Generating Station
Calvert Cliffs Nuclear Power Plant
Cardinal
Chalk Point
Chambers Cogeneration LP
Chesterfield
Cheswick Power Plant
Clover
Conemaugh
Conesville
Cooper
Covington Facility
CP Crane

Davis Besse
Dickerson
Donald C Cook
Dover
Dresden Generating Station
East Bend
Edgembe Genco
FirstEnergy Bruce Mansfield
FirstEnergy Fort Martin Power Station
FirstEnergy Harrison Power Station
FirstEnergy Pleasants Power Station
FirstEnergy W H Sammis
General James M Gavin
H L Spurlock
Herbert A Wagner
Homer City Generating Station
Indian River Generating Station
Ingredion Incorporated
J M Stuart
James River Genco
John E Amos
Joliet 9
Joliet 29
Keystone
Killen Station
Kincaid
LaSalle Generating Station
Limerick
Logan Generating Company
Longview Power Plant
Luke Mill
Mecklenburg Power Station
Miami Fort
Mitchell (WV)
Morgantown Generating Plant
Mountaineer
Mt Storm
North Anna
Orrville
Oyster Creek
P H Glatfelter
P H Glatfelter Chillicothe Facility
Painesville
Peach Bottom
Perry
Powerton

PSEG Hope Creek Generating Station
PSEG Salem Generating Station
Quad Cities Generating Station
Radford Army Ammunition Plant
Rockport
Spruance Genco
Surry
TalenEnergy Montour
TalenEnergy Susquehanna
Tennessee Eastman Operations
Three Mile Island
University of Notre Dame
Virginia City Hybrid Energy Center
W H Zimmer
Waukegan
Wausau Paper Middletown
Whitewater Valley
Will County
Yorktown

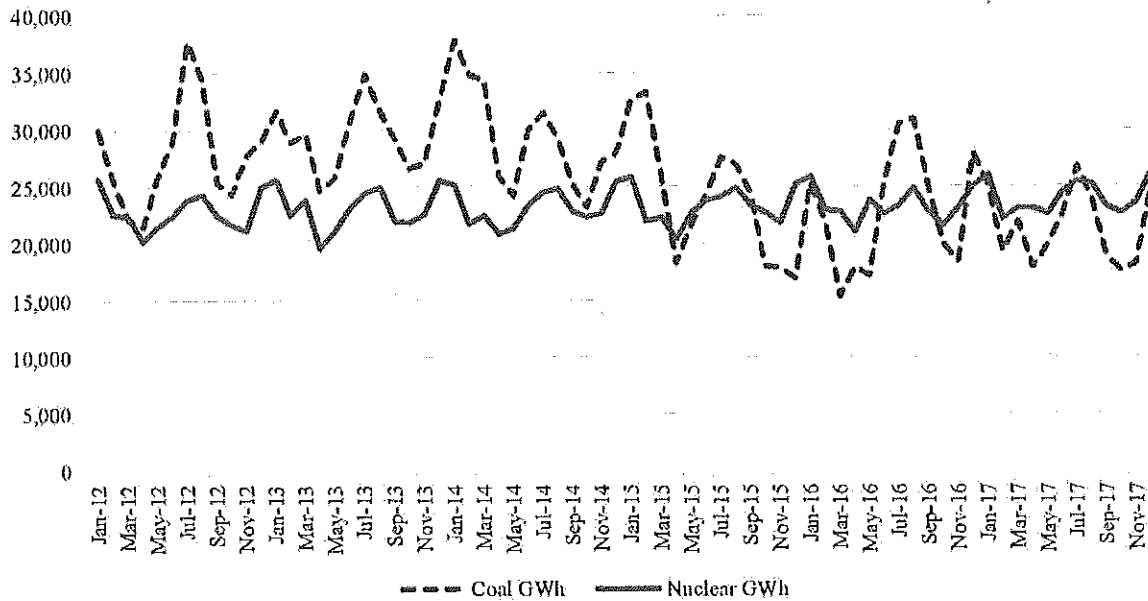
/s/ Christopher Smith
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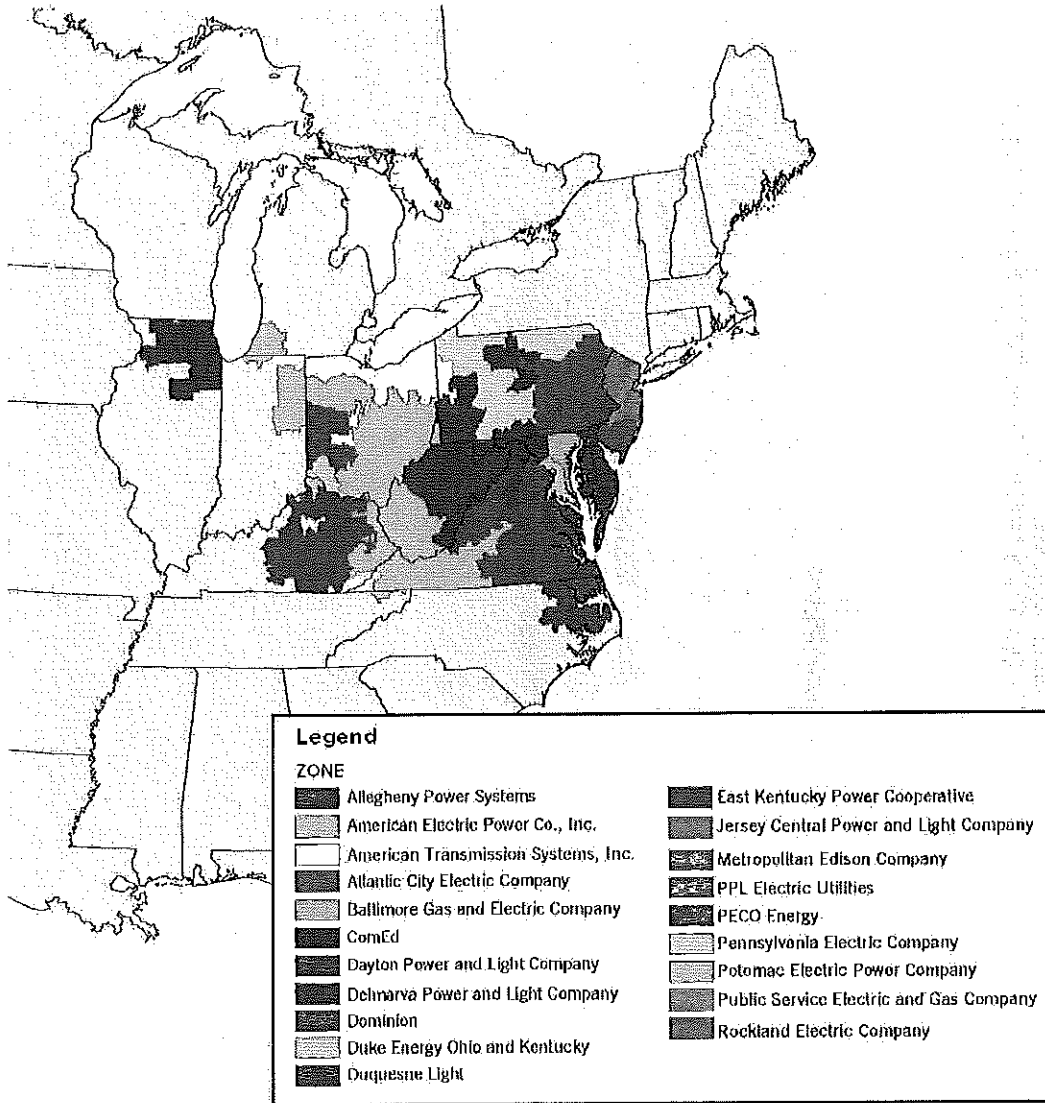
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ATTACHMENT B
OUTPUT OF NUCLEAR AND COAL-FIRED GENERATORS IN PJM
INTERCONNECTION (GWH) (2012-2017)



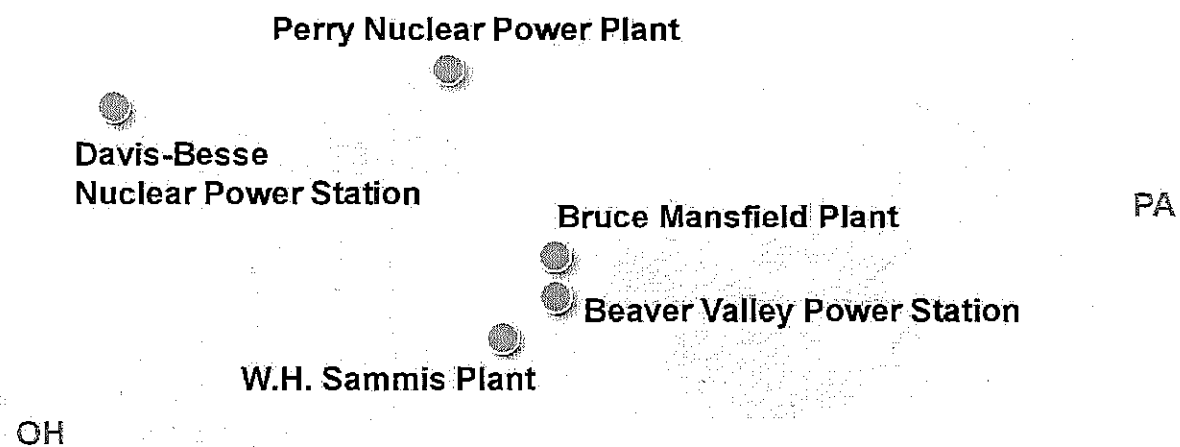
Source: Monitoring Analytics LLC, STATE OF THE MARKET REPORTS FOR PJM (2012-2017), http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2017.shtml.

ATTACHMENT C
MAP OF PJM INTERCONNECTION TRANSMISSION ZONES

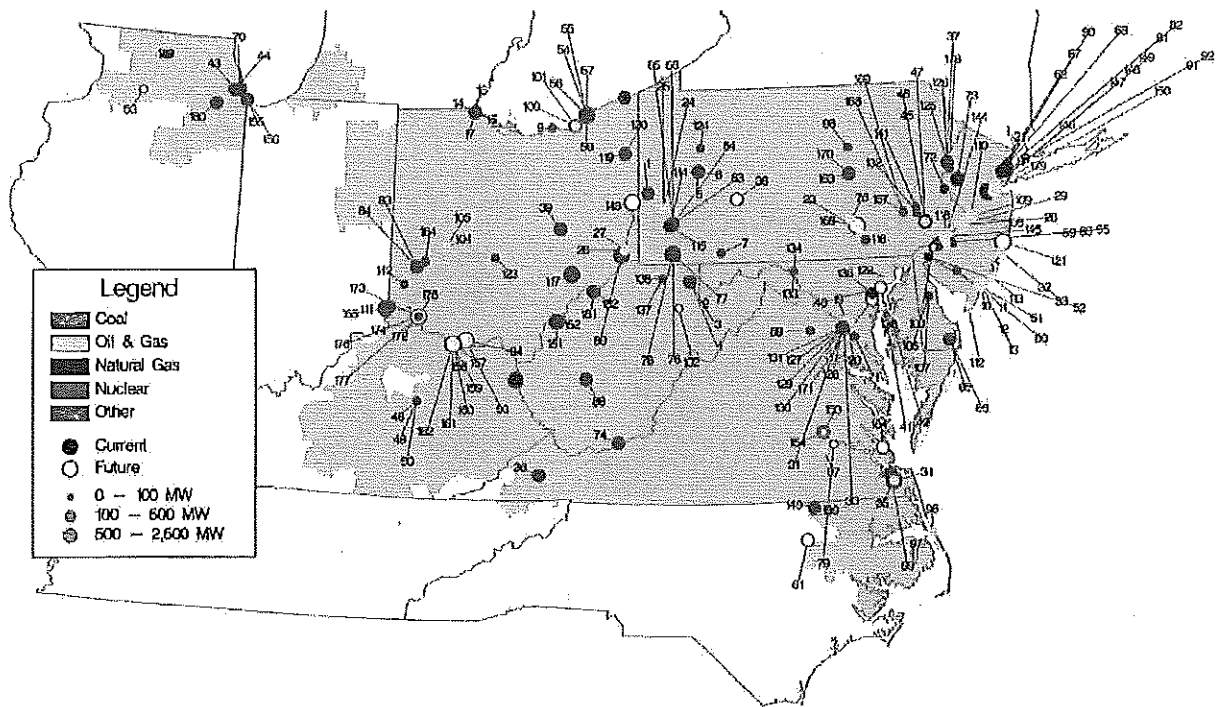


Source: PJM, <http://www.pjm.com/library/~media/about-pjm/pjm-zones.ashx>.

ATTACHMENT D
APPLICANTS' NUCLEAR AND COAL-FIRED GENERATING FACILITIES



ATTACHMENT E
ACTUAL AND PLANNED GENERATION RETIREMENTS IN PJM, 2011-2020



Key on following page.

Source: Monitoring Analytics LLC, STATE OF THE MARKET REPORT FOR PJM, 2017,
http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2017.shtml,
Figure 12-1.

Unit identification for map of PJM unit retirements, 2011 through 2020

ID	Unit	ID	Unit	ID	Unit	ID	Unit	ID	Unit	ID	Unit
1	AES Beaver Valley	36	Cinch River 3	71	GUDE Landfill	106	McKee 1	141	Rolling Hills Landfill Generator	176	Walter C Beckford 3-6
2	Albright 1	37	Columbia Dam Hydro	72	Gilbert 1-4	107	McKee 2	142	SMART Paper	177	Walter C Beckford GT 1-4
3	Albright 2	38	Coker Power Project	73	Glenn Dardner 1-8	108	Mercer 1	143	Spartan 1-4	178	Warren County Landfill
4	Albright 3	39	Conestoga 3	74	Glenn Lyn 5-6	109	Mercer 2	144	Schuykill 1	179	Warren 1-4
5	Armstrong 1	40	Crane 1	75	Harrisburg 4 CT	110	Mercer 3	145	Schuykill District	180	Warr County 3
6	Armstrong 2	41	Crane 2	76	Hatfield's Ferry 1	111	Miami Fort 6	146	Swanton 1	181	Willow Island 1
7	Arnold (Green Mtn. Wind Farm)	42	Crane GT	77	Hatfield's Ferry 2	112	Middle 1-3	147	Swanton 2	182	Willow Island 2
8	Ashland 5	43	Crawford 7	78	Hatfield's Ferry 3	113	Missouri Ave B,C,D	148	Swanton 3	183	Winnago Landfill
9	Avon Lake 7	44	Crawford 8	79	Hopewell James River Cogeneration	114	Mitchell 2	149	Swanton 4	184	Yorktown 1-2
10	BL England 1	45	Cromby 1	80	Huscarl Down 10	115	Mitchell 3	150	Swanton 6		
11	BL England 2	46	Cromby 2	81	Hydgen 1	116	Modern Power Landfill HUG	151	Spartan 1-4		
12	BL England 3	47	Cromby D	82	Hudson 2	117	Muskingum River 1-5	152	Spartan 5		
13	BL England Diesel Units 1-4	48	Dale 1-2	83	Hutchings 1-3, 5-6	118	National Park 1	153	Spruce HUG1 (Rich 1-2)		
14	Bay Shore 1	49	Dale 3	84	Hutchings 4	119	Niles 1	154	Spruce HUG2 (Rich 3-4)		
15	Bay Shore 2	50	Dale 4	85	Inland River 1	120	Niles 2	155	State Line 3		
16	Bay Shore 3	51	Deepwater 1	86	Inland River 3	121	Oyster Creek	156	State Line 4		
17	Bay Shore 4	52	Deepwater 6	87	Ingenco Petersburg	122	Perryman 2	157	Stuart 1		
18	Baymont Cogen Plant (CC)	53	Dixon Lee Landfill Generator	88	Kanawha River 1-2	123	Piney 5	158	Stuart 2		
19	Beading 15	54	Eastlake 1	89	Kammer 1-3	124	Piney Creek HUG	159	Stuart 3		
20	Beading 16	55	Eastlake 2	90	Kearny 10	125	Powell 1	160	Stuart 4		
21	Bergen 3	56	Eastlake 3	91	Kearny 11	126	Powell 2	161	Stuart Diesel 1-4		
22	Big Sandy 7	57	Eastlake 4	92	Kearny 8	127	Potomac River 1	162	Stuart Diesel 1-4		
23	Brunner Island Diesels	58	Eastlake 5	93	Killen 2	128	Potomac River 2	163	Sunbury 1-4		
24	Brunot Island 1B	59	Eddystone 1	94	Killen CT	129	Potomac River 3	164	Tait Battery		
25	Brunot Island 1C	60	Eddystone 2	95	Kinsky Landfill	130	Potomac River 4	165	Towers Creek 1-4		
26	Burger 3	61	Edgemoor HUG (Rocky 1-2)	96	Killy Hawk GT 1	131	Potomac River 5	166	Three Mile Island Unit 1		
27	Burger EMD	62	Edison 1-3	97	Killy Hawk GT 2	132	Poughkeepsie LF (Nuclear)	167	Titus 1		
28	Burlington 11	63	Edison 1	98	Koppers Co. IPP	133	R Paul Smith 3	168	Titus 2		
29	Burlington 9	64	Edison 2	99	Lake Kingman	134	R Paul Smith 4	169	Titus 3		
30	Buzzard Point East Banks 1,2,4-6	65	Edison 3	100	Lake Shore 10	135	Riverside 4	170	Viking Energy HUG		
31	Buzzard Point West Banks 1-9	66	Edison 4	101	Lake Shore EMD	136	Riverside 5	171	Wagner 2		
32	Cedar 1	67	Essex 10-11	102	Laurel Mountain Battery	137	Riversville 5	172	Walter C Beckford 1		
33	Cedar 2	68	Essex 12	103	AMCO Moxus Hook Cogen	138	Riversville 6	173	Walter C Beckford 2		
34	Chesapeake 1-4	69	Fauquier County Landfill	104	Mad River City A	139	Roanoke Valley 1	174	Walter C Beckford 3		
35	Chesapeake 7-10	70	Fisk Street 19	105	Mad River City B	140	Roanoke Valley 2	175	Walter C Beckford 4		

Source: Monitoring Analytics LLC, STATE OF THE MARKET REPORT FOR PJM, 2017, http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2017.shtml, Table 12-6.

Document 2

March 30, 2018

VIA FACSIMILE

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Re: DOE Docket No. EO-18-__

Dear Secretary Perry:

Please find enclosed the Comments in Support and Motion to Intervene of Allegheny Energy Supply Company, LLC ("AE Supply") in response to the Request for Emergency Order Pursuant to Federal Power Act Section 202(c) submitted March 29, 2018, by FirstEnergy Solutions Corp. ("FES").

Thank you for your attention to this matter. Please direct any questions to the undersigned.

Sincerely,

/s/ James R. Hancy

James R. Hancy
President
Allegheny Energy Supply Company, LLC

cc: Bruce J. Walker, Assistant Secretary, DOE OEDER
Patricia A. Hoffman, Principal Deputy Assistant Secretary, DOE OEDER
Rick C. Giannantonio, General Counsel, FirstEnergy Solutions Corp.

Enclosure

**IN THE UNITED STATES OF AMERICA
BEFORE THE DEPARTMENT OF ENERGY**

Request for Emergency Order Pursuant to)
Federal Power Act Section 202(c) of)
FirstEnergy Solutions Corp.)

Docket No. EO-18-__

**COMMENTS IN SUPPORT AND MOTION TO INTERVENE
OF ALLEGHENY ENERGY SUPPLY COMPANY, LLC**

Allegheny Energy Supply Company, LLC (“AE Supply”) files these Comments in support of the “Request for Emergency Order Pursuant to Federal Power Act Section 202(c)” submitted March 29, 2018, by FirstEnergy Solutions Corp. (the “FES Application”).¹ As detailed herein, AE Supply supports the FES Application and respectfully asks the Secretary of Energy (“Secretary”) to exercise his authority under Section 202(c) of the Federal Power Act² to grant the requested relief as soon as possible. In addition, as set forth in Section 2 below, AE Supply respectfully moves to intervene in this proceeding and asks that it be permitted to participate fully as an interested party thereto.³

1. COMMENTS IN SUPPORT

AE Supply respectfully asks the Secretary to promptly grant the FES Application. As established by the FES Application, an emergency exists in PJM Interconnection L.L.C. (“PJM”) within the meaning of Section 202(c) that warrants immediate and decisive action by the Secretary. Yet, as explained by FES:

PJM has done little to prevent this emergency despite the numerous signs for many years that the emergency was coming. Nuclear and

¹ FirstEnergy Solutions Corp. et al., Request for Emergency Order Pursuant to Federal Power Act Section 202(c), DOE Docket No. EO-18-__ (Mar. 29, 2018) (“FES Application”).

² 16 U.S.C. § 824a(c).

³ See 10 C.F.R. § 205.370 (“Requests for action under these regulations will be accepted from any ‘entity,’ State Public Utility Commission, State Energy Agency, or State Governor.”) (emphasis added). Allegheny Energy is an “entity” as that term is used in this regulation. See *id.*

(Cont’d on next page)

coal-fired generators in PJM have been closing at a rapid rate—putting PJM's system resiliency at risk—and many more closures have been announced. PJM continues to claim that all is well with its system, but at the same time shows it does not have a clear view of what resilience is, how to measure it, or how to ensure it. PJM has demonstrated little urgency to remedy this problem any time soon—so immediate action by the Secretary is needed to alleviate the present emergency.⁴

AE Supply is the owner of the 1,368 MW Pleasants Power Station located in Willow Island, WV. The Pleasants Power Station sells all of its output into the PJM markets and thus depends entirely on these markets to compensate it for its costs.

But these markets consistently fail to compensate baseload nuclear and coal-fired generators such as the Pleasants Power Station for the value they provide in terms of fuel security, reliability, and resiliency to the electric grid. As the Secretary has recognized, “[b]ecause wholesale pricing in . . . markets [overseen by the Federal Energy Regulatory Commission] does not adequately consider or accurately value those benefits, generation units that provide the benefits are often not fully compensated for them.”⁵ A recent DOE study similarly summarized the problem as follows: “Markets do not currently compensate resilience, and thus that capability is steadily diminishing due to competitive pressures of ongoing, baseload power plant early retirements.”⁶

This lack of appropriate compensation has resulted in *AE Supply providing official notice to PJM last month of its intent to deactivate its Pleasants Power Station by year end*. Such a

⁴ *Id.* at 1-2.

⁵ Letter from Rick Perry, U.S. Sec’y of Energy, to Chairman & Comm’rs of FERC at 3 (Sept. 28, 2017).

⁶ NAT’L ENERGY TECH. LAB., RELIABILITY, RESILIENCY AND THE ONCOMING WAVE OF RETIRING BASELOAD UNITS VOLUME I: THE CRITICAL ROLE OF THERMAL UNITS DURING EXTREME WEATHER EVENTS 3 (Mar. 13, 2018) (“NETL Report”), available at <https://www.netl.doe.gov/research/energy-analysis/search-publications/vuedetails?id=2594>.

(Cont’d on next page)

shutdown will have a severe adverse impact on the State of West Virginia and its citizens as it provides \$400 million in annual economic impact to West Virginia, and supports 600 direct and indirect jobs.⁷

But these problems are in no way limited to the Pleasants Power Station. Rather, numerous baseload plants in PJM have announced that they are financially challenged and are closing or contemplating closure:

- It is a matter of public record that AE Supply's affiliate FirstEnergy Solutions Corp., which indirectly owns 12,300 MW of generation, likely will file for bankruptcy by the end of March 2018.⁸ Multiple plants are at risk for permanent closure as a result of this expected action.⁹
 - FirstEnergy Solutions submitted notices to PJM on March 28, 2018, that it would deactivate its three nuclear plants, Davis-Besse (908 MW), Perry (1,268 MW), and Beaver Valley (1,872 MW), by 2021.
 - FirstEnergy Corp. announced that Units 5–7 at the W.H. Sammis coal-fired plant (1,490 MW) are in danger of being closed. The company previously announced that Units 1–4 (720 MW) will close by May 2020.
 - FirstEnergy Corp. has announced that the 2,510 MW Bruce Mansfield coal-fired plant is at risk of closure due to the exposure to changing market conditions.
- Dayton Power & Light has announced the closure by June 2018 of the J.M. Stuart coal-fired plant (2,318 MW) and the Killen Station Unit 2 coal-fired plant (600 MW), citing market conditions making the plants not economically viable. Stuart Unit 1 was closed even earlier, on September 30, 2017.
- Owners of the 1,884 MW Homer City coal-fired power plant attempted to sell the plant in 2016, but were unable to find a buyer; Standard & Poor's analysts cite lower power prices and increasing expenses as driving forces behind the facility's ills.

⁷ W. Va Pub. Serv. Comm'n, Initial Brief of Monongahela Power Company and The Potomac Edison Company at 2, Case No. 17-0296-B-PC (Oct. 19, 2017).

⁸ Gavin Bade, *FirstEnergy CEO Says Generation Subsidiary Headed for Bankruptcy Protection*, UTILITY DIVE (Feb. 23, 2018), <https://www.utilitydive.com/news/firstenergy-ceo-says-generation-subsidiary-headed-for-bankruptcy-protection/517743/>; Jeffrey Ryser, *FirstEnergy Continues Push Away from Competitive Generation Subsidiary*, PLATTS MEGAWATT DAILY (Feb. 22, 2018).

⁹ See FES Application at 20-22.

- Exelon has announced that it will close the Oyster Creek nuclear plant (608 MW) in October 2018—a decade before the end of its operating license—citing negative economic factors.
- Exelon has announced the premature closure of the 837 MW Three Mile Island nuclear power plant in September 2019, citing deteriorating economic value.

But these and other baseload nuclear and coal-fired power plants are an integral part of the PJM electric grid and their loss must stop immediately in PJM or the grid will be placed at risk of failure through a lack of generation diversity and over-reliance on generating units that lack secure fuel supply. Such generating units with on-site fuel kept PJM from shedding load during the 2014 Polar Vortex when available generating capacity was only a hair's width more than demand. And such units were critical to keeping the grid supplied during the severe cold weather in the East this past winter.

Indeed, the cold weather in the East from December 27, 2017, through January 8, 2018, provided a real-time, real-life demonstration as to why immediate action is so critical to ensure the health and safety of the Nation. During that period, the eastern U.S. saw extremely cold temperatures and spiking electric demand, but nuclear and coal-fired generators rose to the task and supplied an exceptional amount of the energy needed to meet this demand. The Pleasants Power Station was no exception, having operated near full capacity during the entire period of December 27, 2017, to January 8, 2018, and even delayed a maintenance outage planned for the last week of the year so that it could run during this time of severe need.

If not for the over-performing nuclear and coal-fired generating plants in PJM,¹⁰ the eastern portion of the country would likely have seen grid reliability impacts, as natural gas plants significantly underperformed in large part due to natural gas price spikes and supply

¹⁰ See FES Application at 3-4 n.17.

(Cont'd on next page)

interruptions.¹¹ As the recent DOE study of this cold weather event found, nuclear and coal-fired generation provided 70 percent of output during the event and “coal units in PJM were uniquely positioned to provide the resilience needed at this critical point in time,” providing “74 percent of incremental energy.”¹² The study went on to conclude that:

In the case of PJM, it can also be shown that the demand could not have been met without coal. At peak demand, January 5, 2018, natural gas prices exceeded \$95/MMBtu in eastern PJM. Had coal been removed, a 9-18 GW capacity shortfall would have developed, depending on assumed imports and generation outages, leading to system collapse.¹³

But the tangible and important benefits that Pleasants and other coal-fired generators provided will not be available the next time demand spikes or natural gas supply experiences disruptions if the current trend of premature, economic retirement of coal-fired generating facilities continues. The DOE’s Energy Information Administration “projects 41 GW of coal and 10 GW of nuclear retirements by 2025,” but this projection does not “adequately capture[] the risk” of retirements.¹⁴ The recent DOE study further projects that “as much as 75 GW of coal[-fired generation] could be retired” by 2025, and notes that another source estimates between “30 [and] 50 GW of nuclear could face retirement.”¹⁵ Without these plants, thousands if not millions of customers could have been without power during this recent weather event.

Unless immediate and decisive action is taken by the Secretary, these retirements will place the electric grid at risk of failure through a lack of generation diversity and over-reliance on generating units—such as those fueled by natural-gas and renewable resources—that lack secure

¹¹ See *id.* at 4 n.18.

¹² NETL Report at 12.

¹³ *Id.* at 17 (emphasis added).

¹⁴ *Id.* at 25.

¹⁵ *Id.* at 30.

fuel supply. There is a place of course for natural gas and renewable generation, but over-reliance on such resources will place the grid at risk of failure. As the Secretary stated recently, "America's greatness depends on a reliable, resilient electric grid powered by an 'all of the above' mix of generation resources" that "must include traditional baseload generation with on-site fuel storage that can withstand major fuel supply disruptions caused by natural and man-made disasters."¹⁶ Indeed, "[o]ur economy, government and national defense all depend on electricity. Therefore, ensuring a reliable and resilient electric supply and corresponding supply chain are vital to national security."¹⁷

Nuclear and coal-fired generation are an integral part of that supply chain and immediate action by the Secretary is needed to ensure that they remain so. Accordingly, AE Supply urges the Secretary to grant the FES Application as soon as possible.

2. MOTION TO INTERVENE

AE Supply respectfully moves to intervene in this proceeding and be permitted to participate fully as a interested party thereto. As described above, AE Supply owns and operates Pleasants, an at-risk, merchant coal-fired generating facility in the PJM footprint that falls within the scope of facilities for which the FES Application seeks an emergency order by the Secretary pursuant to Section 202(c) of the Federal Power Act to remain operational and not shut down. Accordingly, AE Supply has an immediate and direct interest in this proceeding that cannot be adequately represented by any other person, party, or entity. Thus, AE Supply respectfully moves to intervene in this proceeding and be permitted to participate fully as an interested party thereto.

¹⁶ Letter from Rick Perry, U.S. Sec'y of Energy, to Chairman & Comm'rs of FERC at 1 (Sept. 28, 2017).

¹⁷ *Id.* at 2.

3. CONCLUSION

WHEREFORE, for the foregoing reasons, AE Supply: (a) respectfully requests that the Secretary grant FES' request for an emergency order and (b) moves to intervene in this proceeding and be permitted to participate fully as an interested party thereto.

Respectfully submitted,

/s/ James R. Haney

James R. Haney

President

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Dated: March 30, 2018

Johnsen, Steven (MA)

From: Andrew McKusick (b) (6)
Sent: Friday, March 30, 2018 12:44 PM
To: Secretary Perry
Subject: Re: FirstEnergy Corp. Petition to Pres. Trump

103 MAR 30 PM 2:52

I am in favor of Federal Government assistance to FirstEnergy Corporation to keep their nuclear and coal-fired power plants running. Specifically, "It asks the Energy Department to use the Federal Power Act to force PJM Interconnection LLC to enter contracts with nuclear and coal-fired plants across the PJM territory." (WSJ)

Andrew McKusick, RPh
(b) (6)



March 30, 2018

Via Electronic Mail

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Catherine Jereza
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Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

On behalf of the Environmental Defense Fund ("EDF") and the Natural Resources Defense Council ("NRDC"), we write to object to First Energy Solutions Corp.'s request for an emergency order under section 202(c) of the Federal Power Act. NRDC and EDF are national environmental advocacy organizations with millions of members and activists across the country, including in Ohio and the PJM service territory who would be harmed by the costs and environmental and public health impacts of such an order.

On March 29, 2018, FirstEnergy Solutions Corp. (“FirstEnergy” or “FES”) formally requested a section 202(c) of the Federal Power Act (“FPA”) emergency order.¹ FES requests that all merchant coal and nuclear generating units in the PJM Interconnection (“PJM”) footprint (all or parts of 13 states and Washington D.C.) with at least 25 days of onsite fuel be provided non-market, cost-of-service rates and guaranteed profits for at least four years (the “profit guarantee request”). FirstEnergy argues that its profit guarantee request is necessary to ensure resilience, despite the Federal Energy Regulatory Commission (“FERC”) recently dismissing this same issue and proposal, finding that “the extensive comments submitted by the RTOs/ISOs do not point to any past or planned generator retirements that may be a threat to grid resilience.”² PJM’s has reaffirmed this finding recently, stating in response to FES’s request that “[t]his is not an issue of reliability. There is no immediate emergency,”³ and that “[n]othing we have seen suggests there is any kind of emergency from these units retiring.”⁴

FES’s profit guarantee request suffers from already examined and dismissed errors and fundamental deficiencies. Namely, the request: (1) is premised on legal flaws; (2) ignores prior and current FERC activity and finding; (3) would impose enormous cost upon American homes and businesses without benefit; and (4) undermine the competitive marketplace. For these reasons, EDF and NRDC agree with the assessments of others, including Sierra Club, the Advanced Energy Economy, the American Council on Renewable Energy, the American Forest & Paper Association, the American Petroleum Institute, the American Wind Energy Association, the Electric Power Supply Association, the Electricity Consumers Resource Council, the Independent Petroleum Association of America, the Interstate Natural Gas Association of

¹ Letter from FirstEnergy Solutions Corporation to the Honorable James Richard Perry (Mar. 29, 2018) (hereinafter “FirstEnergy”).

² *Grid Reliability and Resilience Pricing*, 162 FERC ¶61,012, at P 15 (2018), FERC Docket RM18-1-000 at paragraph 15. Both the FirstEnergy profit guarantee request and proposal at issue before FERC in RM18-1 centered upon an out-of-market cost-of-service plus profit guarantee for resources with onsite fuel, a condition only coal and nuclear assets are able to meet. Both proposals likewise based the rationale for the guarantee on a need to ensure grid resilience. FirstEnergy’s profit guarantee request departs from that at issue in RM18-1 by requesting action only on assets in the PJM footprint (rather than in other RTO/ISOs with capacity markets) and by reducing the onsite fuel requirement to 25 days (rather than 90 days).

³ PJM Statement and Letter to U.S. DOE Secretary Perry.

⁴ Scott DiSavino & Valerie Volcovici, *FirstEnergy seeks emergency lifeline for U.S. nuclear, coal plants*, REUTERS (Mar. 29, 2018, 12:10 PM), <https://www.reuters.com/article/us-firstenergy-nuclear-coal/firstenergy-seeks-emergency-lifeline-for-u-s-nuclear-coal-plants-idUSKBN1H52ET> (quoting PJM’s Senior Vice President Vincent Duane).

America, the Natural Gas Supply Association, the Solar Energy Industries Association, and PJM, that FirstEnergy's request is problematic and flawed.⁵

EDF and NRDC therefore urge the Department to reject FirstEnergy's profit guarantee request.

1. PJM is not facing an emergency and FES's attempt to use Section 202(c) is unlawful.

Section 202(c) expressly is limited to "emergencies" or other "sudden" events.⁶ The Department acknowledges on its own website that Section 202(c) only enables it to impose temporary measures due to an "emergency" or other "sudden" circumstance.⁷ While Section 202(c) does not define either "emergency" or "sudden," the dictionary definitions of these words reinforce that they mean an imminent crisis that is often unexpected.⁸

The so-called "emergency" that FES raises in its profit guarantee request is nothing of the sort. The nuclear facility closures upon which FES primarily relies are scheduled to retire 2-3 years from now.⁹ The other examples are no more convincing. First, FES cites facilities that *may* retire¹⁰—a mere possibility does not rise to an imminent crisis. Second, FES cites facilities that retired in 2017 or announced their future retirement in March 2017. What FES ignores is that in June 2017, PJM *itself* sought Section 202(c) authority to keep the Yorktown coal-fired units

⁵ See <https://epsa.org/wp-content/uploads/2018/03/FINAL-request-for-comment-period-on-FES-202c-filing.pdf>; See https://www.sierraclub.org/sites/www.sierraclub.org/files/blog/2018.03.30_Sierra%20Club%20letter%20to%20DOE.pdf.

⁶ 16 U.S.C. § 824a(c)(1).

⁷ "DOE's Use of Federal Power Act Emergency Authority," DOE, <https://www.energy.gov/oe/services/electricity-policy-coordination-and-implementation/other-regulatory-efforts/does-use>.

⁸ See "Emergency," BLACK'S LAW DICTIONARY 2d Ed., <https://thelawdictionary.org/emergency/> ("Situation requiring immediate attention and remedial action. Involves injury, loss of life, damage to property, or catastrophic interference with the [*sic*] normal activities. A sudden, unexpected, or impending situation"); "Sudden," OXFORD ENGLISH DICTIONARY ONLINE, <https://en.oxforddictionaries.com/definition/sudden> ("Occurring or done quickly and unexpectedly or without warning.").

⁹ FirstEnergy at 8, 20 (noting that Davis-Besse, Perry, and Beaver Valley are scheduled to retire in 2020 or 2021).

¹⁰ *Id.* at 21 (noting that units at the W.H. Sammis coal-fired plant "are in danger of being closed.")

online,¹¹ and yet it did not feel compelled to file a similar request here or for the incidents cited by FES. This is likely because it, too, recognizes that there is no “emergency” or “sudden” event requiring a handout to coal and nuclear generation. As noted by PJM:

PJM does not believe that operating outside of the market to preserve a particular class or type of generation is needed at this time for reliability. The markets have been resilient in attracting new investment. In addition, a variety of tools exist as a backstop should specific generation be needed in a particular area.¹²

While FES selectively quotes PJM’s assertions about the role coal and nuclear generation played during recent weather events in an effort to support its facilities’ necessity,¹³ PJM’s comments only reinforce the lack of “emergency” present here, given that, notwithstanding these assertions, PJM has not deemed the FES closures to be an “emergency” requiring Section 202(c) action.¹⁴ FES also ignores PJM’s statements that its “operations and planning processes [have] ensure[d] margins on the system [that] are robust enough to operate through extreme weather scenarios.”¹⁵

Case law further supports that FES’s profit guarantee request does not identify a basis for an “emergency” under Section 202(c). For example, in *Richmond Power & Light v. FERC*, in response to the 1973 oil embargo, the Commission chose not to invoke its emergency authority, despite concerns of “dire oil shortfalls.”¹⁶ As noted by the D.C. Circuit in upholding the Commission’s decision:

We are fully mindful, of course, that current national policy is to discourage reliance on foreign oil, but we cannot fault the Commission for reading Section

¹¹ DOE, Federal Power Act Section 202(c) – PJM Interconnection & Dominion Energy Virginia, 2017, at <https://www.energy.gov/oe/downloads/federal-power-act-section-202c-pjm-interconnection-dominion-energy-virginia-2017-0>.

¹² U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 1 from Sen. Lisa Murkowski (Jan. 23, 2018).

¹³ FirstEnergy at 6 (citing PJM’s President Andrew Ott).

¹⁴ DiSavino & Volcovici, *supra* note 4 (“PJM, in response, rejected the need for an emergency order.”)

¹⁵ U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 1 from Sen. Lisa Murkowski (Jan. 23, 2018).

¹⁶ *Richmond Power & Light v. FERC*, 574 F.2d 610, 613 (D.C. Cir. 1977).

202(c) as devoid of a solution. *That section speaks of ‘temporary’ emergencies, epitomized by wartime disturbances, and is aimed at situations in which demand for electricity exceeds supply and not at those in which supply is adequate but a means of fueling its production is in disfavor.*¹⁷

The situation described in *Richmond Power & Light* is precisely the type of situation at issue here: inefficient and old coal and nuclear generation are now uneconomic in PJM’s competitive markets and PJM and FERC repeatedly have confirmed that there is not a reliability crisis. As stated by PJM, FirstEnergy’s profit guarantee request is not based on an emergency nor reliability or resilience crisis and instead “fundamentally a corporate issue.”¹⁸ FES’s interest in a bailout for coal and nuclear generation, particularly its own, is not basis for a Section 202(c) order.

2. FirstEnergy seeks to undermine the recent FERC decision and ongoing FERC resilience docket

FirstEnergy’s profit guarantee request substantially mirrors the Grid Resiliency Pricing proposal that FERC unanimously rejected less than three months ago, finding there was no urgent threat to the grid’s reliability.¹⁹

Like that proposal, the FirstEnergy profit guarantee request asks for utility customers to pay above-market “cost-of-service” rates (including a guaranteed profit) to owners of all merchant coal and nuclear generating units with a certain amount of on-site fuel on the theory that those assets are necessary for resilience.

FirstEnergy’s rationale and favored outcome has been rejected. FirstEnergy had opportunity to ask for the reconsideration it seeks now before DOE, but declined to request rehearing at FERC on its January 8 order rejecting the Grid Resiliency Pricing proposal. Instead, FirstEnergy seeks to re-litigate the same issues at DOE without confronting the large body of record evidence amassed at FERC from industry, experts, RTOs and ISOs, states, and other stakeholders demonstrating that the relief FES requests is unnecessary and unrelated for reliability or resilience and would result in unjust and unreasonable rates as well as undue discrimination.

Although FERC found no urgent threat to the grid’s reliability to justify the extraordinary action proposes again now, it did initiate an administrative proceeding to better define and

¹⁷ *Id.* at 615 (emphasis added) (internal citations omitted).

¹⁸ <https://www.reuters.com/article/us-firstenergy-nuclear-coal/firstenergy-seeks-emergency-lifeline-for-u-s-nuclear-coal-plants-idUSKBN1H52ET>.

¹⁹ Reliability and Resilience Pricing, Order Terminating Rulemaking Proceeding, Initiating New Proceeding, and Establishing Additional Procedures, 162 FERC ¶ 61,012 (Jan. 8, 2018).

understand resilience and determine whether additional steps are needed to ensure resilience.²⁰ FirstEnergy attempts to side-step and undermine that proceeding with its request to DOE.

Rather than confront the voluminous evidence and analysis presented before FERC, FirstEnergy relies primarily on a recently released National Energy Technology Laboratory report (“NETL Report”) that incorrectly concludes that power plants with onsite fuel were critical to preserving “resiliency” during the “Bomb Cyclone” in late December to early January.²¹ The NETL Report departs from the majority of studies on the subject. This departure is primarily due to a misinterpretation embedded in the report: that the fact that coal generation increased more in comparison to other forms of generation during stressful winter events was a sign that coal provided resiliency. The actual explanation is far simpler: there are many coal units that are rarely used due to their high-cost, and thus those coal plants are only used when demand is far higher than usual.²² This fundamental mistake is directly attributable to the fact that the report does not rigorously define or measure resilience.²³ In contrast, PJM’s analysis of its systems performance during that weather event shows that there is no looming “resiliency” crisis.²⁴

In fact, coal and nuclear don’t provide many of the reliability services the grid needs. Many types of generators far outperform coal and nuclear generators in their capability to provide

²⁰ Jan. 8 Order at 17-20.

²¹ FirstEnergy Request at 3-8, citing National Energy Technology Laboratory, Reliability, Resilience, and the Coming Wave of Retiring Baseload Units Volume I: The Critical Role of Thermal Units During Extreme Weather Events (Mar. 13, 2018) (“NETL Report”), available at <https://www.netl.doe.gov/research/energy-analysis/search-publications/vuedetails?id=2594>

²² Michael Goggin, Fossil Lab Misses Mark in Cold Weather “Resilience” Report, (Mar. 28, 2018), available at <http://sustainableferc.org/fossil-lab-misses-mark-in-cold-weather-resilience-report/>.

²³ <https://www.nrdc.org/experts/jennifer-chen/whats-resilience-doe-should-know-spending-your-mone>.

²⁴ PJM Interconnection, PJM Cold Snap Performance Dec. 28, 2017 to Jan. 7, 2018 (Feb. 26, 2018), available at <http://www.pjm.com/-/media/library/reports-notice/weather-related/20180226-january-2018-cold-weather-event-report.ashx>. PJM has also noted that it had 5,400 MWs of emergency demand response available during the Bomb Cyclone that it did not end up needing to utilize. U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Lisa Murkowski (Jan. 23, 2018).

services like flexibility, frequency regulation, and primary frequency response, as noted in a PJM chart included in DOE's August 2017 Staff Report.²⁵

PJM likewise disagrees with FES's position, stating that: "This is not an issue of reliability. There is no immediate emergency." ... "Diversity of the fuel supply is important, but the PJM system has adequate power supplies and healthy reserves in operation today, and resources are more diverse than they have ever been. Nothing we have seen to date indicates that an emergency would result from the generator retirements. The potential for the retirements has been discussed publicly for some time. In anticipation, PJM took a preliminary look at the effect of the retirements on the system. We found that the system would remain reliable. We have adequate amounts of generation available."²⁶

3. FirstEnergy Seeks to Impose Enormous Cost Upon the American Public

FirstEnergy seeks compensation for "operating expenses, costs of capital and debt, and a fair return on equity and investment." It specifically seeks cost and profit guarantees antithetical to how markets operate, with "full cost recovery consistent with ratemaking standards and principles or...full recovery of all costs necessary to ensure continued operations." FirstEnergy does not estimate in its application the amount of money it requests DOE take from the ratepayer and give to uneconomic coal and nuclear plants in PJM. However, because the profit guarantee request mirrors the already examined and denied proposal at issue before FERC in RM18-1-000, rough estimates are available.

Independent analysis found that guaranteeing costs and profits to coal and nuclear assets would potentially increase costs on consumers and businesses in PJM's retail choice states by \$8.1 billion annually, a roughly 19% increase in total costs.²⁷

4. FirstEnergy Seeks to Undermine Competitive Markets

FirstEnergy's profit guarantee request asks that coal and nuclear plants in PJM be provided a non-market cost-of-service plus profit rate. This rate would be substantially higher than what a competitive marketplace provides. Higher prices are inherent to the profit guarantee request; as FirstEnergy previously explained in 2011, "competition is the best way to offer lower

²⁵

https://www.energy.gov/sites/prod/files/2017/08/f36/Staff%20Report%20on%20Electricity%20Markets%20and%20Reliability_0.pdf at 86.

²⁶ <https://www.rtoinsider.com/pjm-ferc-resilience-rick-perry-first-energy-89464/>

²⁷ http://energyinnovation.org/wp-content/uploads/2017/12/20171025_Resilience-NOPR-Cost-Research-Note-UPDATED.pdf at 4-5.

generation prices to customers, increased productivity and efficiencies from existing generating facilities, provide the appropriate market signals regarding the need for new generation, and promote jobs and economic growth.”²⁸

Although FirstEnergy no longer agrees with its own statement, FERC continues to favor competitive marketplaces to ensure a reliable, resilient electric grid at just and reasonable rates on the basis of “substantial and well-documented economic benefits that these markets provide to consumers.”²⁹ By seeking out-of-market profit guarantees for an entire class of resources throughout PJM’s territory, FirstEnergy strikes at the core of FERC’s statutory mission and mandate by seeking to substantially (if not fatally) impair competitive wholesale markets. Such a sweeping refutation of competitive markets would not only undermine a policy meant to protect the public interest but also the investment decisions made throughout the energy sector.

FirstEnergy’s profit guarantee request suggests that it no longer believes in competitive markets, citing to already raised and denied argument.³⁰ FirstEnergy’s assertion to this effect, as described above, has thus already been heard, considered, and found to be inaccurate. Improvements to wholesale markets are possible, but generally over-, not under-procurement has been consistently observed.³¹ Nor does FirstEnergy’s repeated request suggest that market structures are so fundamentally flawed that FERC’s reliance upon markets is misplaced; indeed, “[a]s part of its ongoing oversight of wholesale electric markets, the Commission continues to evaluate its current rules and has issued several orders to ensure that our rates in our markets remain just and reasonable and not unduly discriminatory or preferential.”³² Because of this, “[t]he Commission’s endorsement of markets does not conflict with its oversight of reliability, and the Commission has been able to focus on both without compromising its commitment to either.”³³

²⁸ <https://seekingalpha.com/article/284013-firstenergys-ceo-discusses-q2-2011-results-earnings-call-transcript?page=2>.

²⁹ RM18-1 at paragraph 11.

³⁰ FirstEnergy at 8, “‘Distorted price signals’ in the organized markets overseen by [FERC], such as PJM, ‘have resulted in under-valuation of grid reliability and resiliency benefits provided by traditional baseload resources, such as [those powered by] coal and nuclear’ fuel.”

³¹ <https://www.nrdc.org/experts/jennifer-chen/our-grid-needs-go-diet-get-leaner-and-greener>

³² RM18-1 at paragraph 10.

³³ RM18-1 at paragraph 11.

5. Conclusion

For the foregoing reasons, EDF and NRDC ask the Department of Energy to deny the FirstEnergy profit guarantee request.

Sincerely,

/s/ Michael Panfil

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ENVIRONMENTAL LAW & POLICY CENTER

Protecting the Midwest's Environment and Natural Heritage

March 30, 2018

VIA ELECTRONIC MAIL AND U.S. MAIL

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Dear Secretary Perry and Deputy Assistant Secretary Jereza,

On March 29, 2018, FirstEnergy Solutions Corp. ("FirstEnergy" or "FES") submitted a request for an emergency order pursuant to, *inter alia*, Section 202(c) of the Federal Power Act. FirstEnergy requests an order from the Department of Energy that would require utility customers to pay above-market cost-of-service rates, including a guaranteed profit, for at least four years to owners of merchant coal and nuclear generating units in PJM. FirstEnergy contends that these payments are essential to ensure "resiliency" in the PJM system and avoid an "emergency" under the extraordinary circumstances outlined in Section 202(c). No such emergency exists: FirstEnergy has failed to show that resiliency is at risk, or that its coal and nuclear units—which may be retired over the next seven years—are essential to ensuring such resiliency.

The Environmental Law and Policy Center¹ ("ELPC") has a substantial interest in this matter and would be adversely affected by an order granting FES' Section 202(c) request. ELPC has members throughout the Midwest, including those residing in PJM's service territory. If

¹ ELPC is a public interest environmental legal advocacy and eco-business innovation organization working throughout the Midwest states to improve environmental quality and protect natural resources in the Midwest on behalf of our organization, members and clients. ELPC works to avoid risks and injuries to public health, clean water, clean air and landscapes in ways that are good for the environment and good for the economy.

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Harry Drucker, Chairperson • Howard A. Learner, Executive Director
Chicago, IL • Columbus, OH • Des Moines, IA • Duluth, MN • Grand Rapids, MI • Indianapolis, IN
Jamestown, SD • Madison, WI • Minneapolis/St. Paul, MN • Sioux Falls, SD • Washington, D.C.

DOE-17-0427-B-000974

granted, FES' proposed order would raise electricity bills for these members, directly undermining ELPC's mission to promote affordable clean energy throughout the Midwest. While ELPC reserves the right to expand on its objections to FES' request, the fast track requested by FES merits this immediate response.²

First, it is clear that there is no emergency in PJM. PJM is reliable and will remain so for the foreseeable future. FES' allegations of an emergency situation in the PJM market are directly contradicted by PJM itself. As stated by PJM spokeswoman Susan Buehler:

This is not an issue of reliability. There is no immediate emergency. Diversity of the fuel supply is important, but the PJM system has adequate power supplies and healthy reserves in operation today, and resources are more diverse than they have ever been. Nothing we have seen to date indicates that an emergency would result from the generator retirements.³

Second, FES blames the market for undercompensating what are, in truth, uneconomical resources. The company's desire to continue operating its nuclear and coal facilities by forcing customers to pay higher prices is not in the national interest – it is in FirstEnergy's interest. The American Petroleum Institute succinctly captured the detrimental impact of FirstEnergy's proposal:

"FirstEnergy needs to stop misleading the public and government officials about the status of its power plants in Ohio and Pennsylvania," said API Market Development Group Director Todd Snitchler (and former chairman of the Public Utilities Commission of Ohio.) "FirstEnergy's latest attempt to spread a false narrative surrounding the reliability of the electric grid is nothing more than a ruse that will force Main Street consumers to pay higher prices."⁴

All available evidence contradicts FirstEnergy's efforts to invent an "emergency" where none exists. PJM is ensuring system reliability and resiliency, and there is no basis for disrupting its system to prop up FirstEnergy's aging nuclear and coal units.

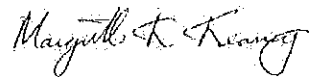
For the foregoing reasons, ELPC respectfully requests that the Department of Energy promptly deny the application of FirstEnergy Solutions for emergency relief under Section 202(c) of the Federal Power Act.

² By notifying the Department of its objection to FES' request, ELPC does not waive, and explicitly preserves, any rights before the Department of Energy, the Federal Energy Regulatory Commission, or any other federal agency and in any court with jurisdiction over matters arising from or related to FES's request.

³ Dan Shingler, *FirstEnergy seeks federal government help for its struggling plants*, CRAIN'S CLEVELAND BUSINESS (March 29, 2018), <http://www.crainscleveland.com/article/20180329/news/156551/firstenergy-seeks-federal-government-help-its-struggling-plants>.

⁴ John Funk, *FirstEnergy DOE emergency appeal another ruse for "bailout" say opponents*, CLEVELAND PLAIN DEALER (March 30, 2018), http://www.cleveland.com/business/index.ssf/2018/03/firstenergy_doe_emergency_appe.html.

Respectfully submitted,



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March 30, 2018

VIA COURIER

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: Joint Request of the Energy Industry Trade Associations for Notice-and-Comment Procedures Regarding the March 29, 2018 Request of First Energy Solutions for an Emergency Order Pursuant to Section 202(c) of the Federal Power Act

Dear Secretary Perry:

The Advanced Energy Economy, the American Council on Renewable Energy, the American Forest & Paper Association, the American Petroleum Institute, the American Wind Energy Association, the Electric Power Supply Association, the Electricity Consumers Resource Council, the Independent Petroleum Association of America, the Interstate Natural Gas Association of America, the Natural Gas Supply Association, and the Solar Energy Industries Association (collectively, “Joint Industry Commenters”) hereby respectfully submit this joint request that the Secretary of Energy establish notice-and-comment procedures with respect to the March 29, 2018 request (the “March 29 Request”) of FirstEnergy Solutions (“FE Solutions”) for issuance of an order pursuant to Section 202(c) of the Federal Power Act (the “FPA”).¹ In the March 29 Request, FE Solutions asks the Secretary to require PJM Interconnection, L.L.C. (“PJM”) to pay certain nuclear-powered and coal-fired generators “cost-based rates that provide for full cost recovery”² As was well-documented in the recent proceeding before the Federal Energy Regulatory Commission (“FERC”) initiated by the Secretary’s October 10, 2017 proposed rulemaking on grid resilience pricing,³ such action would have far reaching implications for the PJM markets and for a broad spectrum of parties, including those represented by the Joint Industry Commenters. It is, therefore, imperative that all stakeholders be afforded notice, and a meaningful opportunity to be heard, before any favorable action is taken on the March 29 Request.⁴

¹ 16 U.S.C. § 824a(c) (2017).

² March 29 Request at 31.

³ See *Grid Resilience Pricing Rule*, Notice of Proposed Rulemaking, 82 Fed. Reg. 46,940 (Oct. 10, 2017) (the “October 10 NOPR”).

⁴ Naturally, the Joint Industry Commenters would not object to the Secretary’s rejection of the March 29 Request without notice and comment.

The purported problem prompting the March 29 Request is the same one that was the subject of the Secretary's October 10 NOPR.⁵ On January 8, 2018, FERC issued an order terminating that rulemaking and initiating a separate proceeding in order "to examine holistically the resilience of the bulk power system."⁶ FERC held that none of the participants in the rulemaking, including FE Solutions, which filed extensive comments, had demonstrated that existing tariffs were unjust and unreasonable or that the proposed cost-based rates for select generators were just and reasonable.⁷ FERC also relied on "extensive comments" from PJM and other system operators which identified no "past or planned generator retirements that may be a threat to grid resilience."⁸ By its March 29 Request, FE Solutions is asking the Secretary to second-guess FERC's expert findings on a record substantially less developed than that in the FERC proceeding. This is particularly problematic where the proposed remedy is concerned, because Section 202(c) of the FPA unambiguously requires that any compensation required by the Secretary be "just and reasonable."⁹ FE Solutions is also asking the Secretary to disregard the Department of Energy's own regulations, which clearly state that "economic factors relating to service . . . generally will not be considered as emergencies unless the inability to supply electric service is imminent."¹⁰ As recognized in the FERC proceeding and as discussed below, there is no imminent threat.

Even leaving aside the merits and assuming *arguendo* that the March 29 Request identifies a valid problem, FE Solutions's own conduct in response to the Commission's January 8 Order belies claims that there is any *immediate* problem requiring issuance of an order before affected parties have a meaningful opportunity to be heard. Specifically, FE Solutions did not avail itself of the opportunity to request rehearing of the January 8 Order within the 30 days prescribed by the FPA¹¹ and waited nearly three months to file the March 29 Request. It would be manifestly unreasonable and unfair to both other interested parties and the Secretary for FE Solutions to demand that the Secretary act without hearing from interested parties, including PJM, after having failed to exercise its right to request rehearing before FERC and waited nearly three months before challenging FERC's order through the March 29 Request to the Secretary.

It is also telling that the most immediate considerations underlying FE Solutions's March 29 Request are that FE Solutions: (1) "likely will file for bankruptcy by the end of March 2018"; and (2) has "already submitted notice to PJM that it would deactivate its nuclear

⁵ See *Grid Resilience Pricing Rule*, Notice of Proposed Rulemaking, 82 Fed. Reg. 46,940 (Oct. 10, 2017).

⁶ *Grid Reliability & Resilience Pricing*, 162 FERC ¶ 61,012 at P 1 (2018) (the "January 8 Order").

⁷ See *id.* at PP 14-16.

⁸ *Id.* at P 15.

⁹ 16 U.S.C. § 824a(c) (2012).

¹⁰ 10 C.F.R. § 205.371 (2017).

¹¹ See 16 U.S.C. § 825l(a) (2012).

The Honorable James Richard Perry
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assets . . . in 2020 and 2021.”¹² Notwithstanding FE Solutions’s assertions to the contrary, these considerations both underscore the lack of urgency in this case. First, the near-term effect of a bankruptcy filing will be to decrease, not increase, the financial pressures on FE Solutions inasmuch as actions to collect pre-petition debts will be stayed, giving it a “breathing spell” while it reorganizes.¹³ While the bankruptcy filing may be an unwelcome event for FE Solutions and its stakeholders, that event only serves to lessen the immediacy of any alleged problem facing society arising from threatened retirements of its facilities. Second, threatened retirements that will not occur until 2020 and 2021 can hardly be said to present an issue so immediate as to justify denying affected parties the opportunity to comment and depriving the Secretary of the benefit of those parties’ input.¹⁴

For the foregoing reasons, the Joint Industry Commenters respectfully request that the Secretary establish notice-and-comment procedures before taking any favorable action on the March 29 Request. Specifically, the Secretary should provide for publication of a notice of the March 29 Request in the *Federal Register* and establish a comment period of at least 60 days. Such a comment period would be consistent with the requirements of Executive Order 12866, which states that “each agency should afford the public a meaningful opportunity to comment on any proposed regulation, which in most cases should include a comment period of not less than 60 days.”¹⁵

Thank you for your consideration of this matter.

Very truly yours,

Greg Wetstone
President and CEO
Todd Foley
Senior Vice President, Policy &
Government Relations
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¹² See March 29 Request at 8 (footnote omitted).

¹³ *In re Robinson*, 764 F.3d 554, 559 (6th Cir. 2014) (quoting H.R.Rep. No. 95–595, at 340 (1978), 1978 U.S.C.C.A.N. 5963, 6297).

¹⁴ FE Solutions also fails to acknowledge that those retirements cannot occur until PJM reviews their potential reliability impacts, and that, to the extent reliability impacts are identified, PJM has authority to take steps to address them.

¹⁵ *Regulatory Planning and Review*, Exec. Order No. 12866, 58 Fed. Reg. 51,735, 1993 WL 13149641, § 6 (Sept. 30, 1993).

The Honorable James Richard Perry
March 30, 2018
Page 4

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The Honorable James Richard Perry
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Page 5

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cc: Bruce J. Walker, Assistant Secretary, DOE Office of Electric
Delivery & Energy Reliability
Patricia A. Hoffman, Principal Deputy Assistant Secretary,
DOE Office of Electric Delivery & Energy Reliability
The Honorable Kevin J. McIntyre, Chairman, FERC
The Honorable Cheryl A. LaFleur, Commissioner, FERC
The Honorable Neil Chatterjee, Commissioner, FERC
The Honorable Robert F. Powelson, Commissioner, FERC
The Honorable Richard Glick, Commissioner, FERC
The Honorable Kimberly D. Bose, Secretary, FERC

Johnsen, Steven (MA)

From: Secretary Perry
Sent: Friday, March 30, 2018 1:23 PM
To: Johnsen, Steven (MA)
Subject: FW: Group Letter on FES 202(c) Letter
Attachments: FINAL request for comment period on FES 202c filing.pdf; ATT00001.htm

From: John E. Shelk [mailto:Jshelk@epsa.org]
Sent: Friday, March 30, 2018 12:31 PM
To: Secretary Perry <The.Secretary@hq.doe.gov>; McCormack, Brian <Brian.Mccormack@hq.doe.gov>; Menezes, Mark <Mark.Menezes@hq.doe.gov>; Walker, Bruce <Bruce.Walker@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Cade, Steven <Steven.Cade@hq.doe.gov>
Subject: Group Letter on FES 202(c) Letter

Please see attached courtesy copy of letter from 11 organizations to the Secretary as being hand delivered to DOE presently. I was asked to send this to each of you on behalf of the group.

Best,
John

March 30, 2018

Matthew E. Price
Tel +1 202 639 6873
MPrice@jenner.com

VIA COURIER

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Ave. SW
Washington, DC 20585

Re: FirstEnergy Solutions Corporation's Request for Emergency Order Pursuant to Federal Power Act Section 202(c)

Dear Secretary Perry:

Exelon Corporation ("Exelon") has received an application by FirstEnergy Solutions Corporation for an order pursuant to the emergency provisions of Section 202(c) of the Federal Power Act, 16 U.S.C. § 824a(c). The closure of FirstEnergy's three emissions-free nuclear plants will immediately erase the environmental benefits of more than 25 years of wind and solar development in the markets they serve. As the nation's largest producer of emissions-free energy, Exelon urges policymakers to prioritize reforms that fix widely acknowledged market rule flaws that unfairly disadvantage nuclear plants, which are an indispensable component of a resilient and secure electric grid and serve as economic engines for the communities they serve.

We note that PJM's response to the application suggests that traditional reliability analyses can be used to determine whether action by the Department is needed. *See* Letter from Vincent P. Duane to the Honorable James Richard Perry, March 30, 2018. However, both FERC and PJM have acknowledged that traditional reliability analyses do not encompass the resilience of supply. *See Grid Reliability and Resilience Pricing*, 162 FERC ¶ 61,012, at PP 22-24 (2018); Comments and Response of PJM Interconnection, L.L.C., FERC Docket No. AD18-7-000, at 4, 12-14 (March 9, 2018). Therefore, PJM's reliability evaluation is not dispositive of whether action is needed.

Exelon reserves its rights to supplement its response under 10 C.F.R. § 205.374, and provide any other information relevant to the requested action.

Sincerely,



Matthew E. Price
Counsel for Exelon Corporation

cc: Bruce J. Walker, Assistant Secretary, DOE Office of Electricity Delivery & Energy Reliability
Patricia A. Hoffman, Principal Deputy Assistant Secretary, DOE Office of Electricity Delivery & Energy Reliability
FirstEnergy Solutions Corp.
Federal Energy Regulatory Commission
Delaware Public Service Commission
Illinois Commerce Commission
Indiana Utility Regulatory Commission
Kentucky Public Service Commission
Maryland Public Service Commission
Michigan Public Service Commission
State of New Jersey Board of Public Utilities
North Carolina Utilities Commission
Public Utilities Commission of Ohio
Pennsylvania Public Utilities Commission
Tennessee Public Utility Commissions
Commonwealth of Virginia State Corporation Commission
Public Service Commission of West Virginia

New York Public Service Commission
Public Service Commission of the District of Columbia
PJM Interconnection
ReliabilityFirst Corp.
SERC Reliability Corporation
AES Warrior Run
Avon Lake
B L England
Beaver Valley
Birchwood Power
Braidwood Generation Station
Brandon Shores
Brunner Island
Byron Generating Station
Calvert Cliffs Nuclear Power Plant
Cardinal
Chalk Point
Chambers Cogeneration LP
Chesterfield
Cheswick Power Plant
Clover
Conemaugh
Conesville
Cooper
Covington Facility
CP Crane
Davis Besse
Dickerson
Donald C Cook

Dover

Dresden Generating Station

East Bend

Edgecombe Genco

FirstEnergy Bruce Mansfield

FirstEnergy Fort Martin Power Station

FirstEnergy Harrison Power Station

FirstEnergy Pleasants Power Station

FirstEnergy W H Sammis

FirstEnergy Solutions Corp.

General James M Gavin

H L Spurlock

Herbert A Wagner

Homer City Generating Station

Indian River Generating Station

Ingredion Incorporated

J M Stuart

James River Genco

John E Amos

Joliet 9

Joliet 29

Keystone

Killen Station

Kincaid

LaSalle Generating Station

Limerick

Logan Generating Company

Longview Power Plant

Luke Mill

Mecklenburg Power Station
Miami Fort
Mitchell (WV)
Morgantown Generating Plant
Mountaineer
Mt Storm
North Anna
Orrville
Oyster Creek
P H Glatfelter
P H Glatfelter Chillicothe Facility
Painesville
Peach Bottom
Perry
Powerton
PSEG Hope Creek Generating Station
PSEG Salem Generating Station
Quad Cities Generating Station
Radford Army Ammunition Plant
Rockport
Spruance Genco
Surry
TalenEnergy Montour
TalenEnergy Susquehanna
Tennessee Eastman Operations
Three Mile Island
University of Notre Dame
Virginia City Hybrid Energy Center
W H Zimmer

The Honorable James Richard Perry
March 30, 2018
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Waukegan

Wausau Paper Middletown

Whitewater Valley

Will County

Yorktown

JENNER & BLOCK

Jenner & Block LLP
1099 New York Avenue, NW
Suite 900
Washington, DC 20001-4412

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Ave. SW
Washington, DC 20585

Document 8

March 30, 2018

VIA FACSIMILE

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: Request for Emergency Order Pursuant to Federal Power Act Section 202(c)

Dear Secretary Perry:

FirstEnergy Solutions Corp. ("FES"), on behalf of its affiliates named in its March 29, 2018 Section 202(c) application (the "Application"), respectfully responds herein to the March 30, 2018 letter to you from PJM Interconnection, LLC ("PJM") regarding the Application. PJM appears to misunderstand the point of the Application and the action it seeks. Yet, at the same time, PJM's response reinforces the need for the emergency relief requested in it. And perhaps most tellingly, PJM, as it did before FERC, continues to ignore resiliency as a critical and separate component of electric grid security. Indeed, the word resiliency is nowhere even mentioned in its letter.

That PJM misunderstands the thrust of the Application is apparent in how it misstates the basis upon which FES requests the Secretary to act. The immediate emergency is not only the result of any individual plant retiring nor the result of the announced plant retirements of FirstEnergy Solutions' affiliates. The immediate emergency encompasses a far bigger problem that is the result of the combination of numerous plants that have already retired and many more that are likely to do so in the near future resulting in a permanent and irreparable loss of resiliency to the PJM-managed grid. By trying to narrowly frame the problem, PJM continues to assume away the legitimacy of this resiliency crisis.

PJM states that it will evaluate these specific deactivations but its calculus for evaluating the need for plants that have placed deactivation requests is overly narrow and does *not* evaluate resiliency. By its own admission, PJM focuses on "systemic adequacy" (i.e., capacity/load balance) and "local reliability issues, such as insufficient voltage support." In effect, PJM is asking the Secretary defer action on the Application and instead rely on a narrow process run by an entity that has admitted that it does not have a clear view of what resilience is, how to measure it, or how to ensure it.

As the Application explained, the PJM system must also be *resilient* if it is going to satisfy its obligation to maintain service to its customers. PJM fails to even acknowledge the need for system resiliency, let alone explain how it is seeking to maintain it. And insofar as PJM is not addressing the need for resiliency, emergency action by the Secretary is needed to do so.

Like they did before FERC, PJM continues to advocate for delay. Is continues to ask the Secretary (and FERC) to rely and trust its process. FES respectfully submits that allowing PJM

to continue to kick the can down the road is how we have arrived at this crisis. The time for action is now.

Respectfully submitted,

William S. Scherman
Jeffrey M. Jakubiak
Jennifer C. Mansh
Gibson, Dunn & Crutcher LLP

/s/ Rick C. Giannantonio
Rick C. Giannantonio
General Counsel
FirstEnergy Solutions Corp.

Counsel for Applicants

cc: Bruce J. Walker, Assistant Secretary, DOE OEDER
Patricia A. Hoffman, Principal Deputy Assistant Secretary, OEDER

Johnsen, Steven (MA)

From: Kim (b) (6)
Sent: Friday, March 30, 2018 1:20 AM
To: Secretary Perry
Subject: Perry Nuclear Power Plant

Mr. Rick Perry.

I am writing to you asking for your help your department and President Thump to save our Nuclear Power Plant in Perry Ohio. We need our plant (b) (6)

(b) (6) Our communities will suffer if these power plants close up in 2021 .

Our plant FirstEnergy is filling bankruptcy today Friday March 30 the 2018.

Please Help us Mr. Perry save our power plants 750 employees including myself will loose our jobs and medical insurance which we need . I would appreciate anything you and your department can do to save our plants . Thank You.

Gary L. Godfrey
(b) (6)

Sent from my Verizon Wireless 4G LTE DROID

18 MAR 30 AM 11

Johnsen, Steven (MA)

From: Secretary Perry
Sent: Friday, March 30, 2018 1:27 PM
To: Johnsen, Steven (MA)
Subject: FW: PJM Response to First Energy March 29 Request to the Secretary for Section 202 (c) Emergency Relief
Attachments: FE Solutions Request for Emergency Relief (W0153752x8DF47).pdf

From: Glazer, Craig [mailto:Craig.Glazer@pjm.com]
Sent: Friday, March 30, 2018 12:09 PM
To: Secretary Perry <The.Secretary@hq.doe.gov>
Cc: Menezes, Mark <Mark.Menezes@hq.doe.gov>; Walker, Bruce <Bruce.Walker@hq.doe.gov>; Cunningham, Sean <Sean.Cunningham@hq.doe.gov>; Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Duane, Vincent P. <Vincent.Duane@pjm.com>
Subject: PJM Response to First Energy March 29 Request to the Secretary for Section 202 (c) Emergency Relief

PJM is submitting for the Secretary's consideration the attached letter in response to First Energy's March 29 request for emergency relief. In this response, PJM outlines the process it will be undertaking, consistent with its FERC-approved tariff, to review the reliability impacts from the announced deactivations. Accordingly, PJM requests the Secretary to hold First Energy's request in abeyance so that the Secretary may have the benefit of PJM's analysis of the reliability impacts, if any, associated with the announced deactivations.

Should you have any questions or seek additional information, please contact me at the address below.

CRAIG GLAZER
Vice President-Federal Government Policy
PJM Interconnection, LLC—D.C. Office

Suite 600
1200 G Street, N.W.
Washington, D.C. 20005
(b) (6)
Craig.Glazer@PJM.COM



2750 Monroe Boulevard
Audubon, PA 19403-2497

Vincent P. Duane
Sr. VP General Counsel, Law, Compliance
& External Affairs
610.666.4367
610.666.4281 FAX
Vincent.duane@pjm.com

March 30, 2018

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: FirstEnergy Solutions' Request for Emergency Relief under Section 202 of the Federal Power Act

Dear Secretary Perry:

PJM Interconnection, LLC (PJM) respectfully seeks to submit this response to the above-referenced request filed by FirstEnergy Solutions and affiliates (FES) on March 29, 2018. While the PJM system presently is reliable by all measures, PJM will refrain, at this time, from responding to FES' assertion that an "emergency condition" will arise should certain FES nuclear plants and potentially certain FES coal plants retire in upcoming years as announced or threatened by the company.¹

PJM will not use this opportunity to express agreement or disagreement with several major points of argument advanced by FES; nor will we correct at this time several misstated facts presented by FES. Instead, PJM simply points out to the Secretary two very obvious and objective facts that relieve the Department from the need to take precipitous, immediate action to address FES' request.

First, whether FES' actions create a reliability concern that may threaten the stable and reliable operation of the grid, much less constitute an emergency within the meaning of Section 202(c) of the Federal Power Act, is a question that will be answered by a proscribed, detailed and regularly employed process found in Part V of the PJM Tariff. Consistent with the PJM Tariff, over the next 30 days, PJM will undertake a thorough analysis of its system to determine whether the announced retirements would present systemic adequacy issues or any local reliability issues, such as insufficient voltage support. Should any such finding result, the PJM Tariff provides an additional 60 days to work with FES and a range of tools available, including ordering transmission system upgrades and, if necessary, offering full cost of service compensation under Part V of the PJM Tariff to induce assets to remain temporarily on-line. Ultimately, PJM could also join FES in its instant request should other remedial options prove insufficient.

Second, PJM can state without reservation there is no immediate threat to system reliability. Indeed, the FES units that announced their expected retirement earlier this week, by their own disclosures, will remain operational in most cases until through May 2021. Moreover, these announcements are not binding – FES

¹ Curiously, the request purports to seek relief for the entire FES merchant fleet - and somehow on behalf of others - relief for *all* other coal and nuclear units in PJM, totaling over 80 generation units. PJM will evaluate the question of impaired reliability or an "emergency condition" based on actual facts – announced retirements – not on the company's general dissatisfaction with the PJM markets or its competitive position therein. Nor will PJM evaluate the impact of closure of other companies' plants unless or until owners of such plants raise the matter with PJM.

can elect to rescind this notice, or should assets be sold, a subsequent purchaser likewise may decide to continue to operate the units. But even assuming these units do in fact close as of the dates announced, PJM, FERC, and the Department of Energy will have ample time before then to take measures, which at the extreme might include the kind of relief sought in the instant request.

PJM therefore respectfully requests that the Secretary allow PJM's FERC-accepted process to unfold in an orderly manner and refrain from taking unnecessary, extraordinary and precedential immediate action as sought by FES. PJM will commit to sharing publicly (to the maximum extent possible), and in any event to the Department of Energy, our findings resulting from our 30-day process for evaluating the system implications of FES' announced retirements.

Thank you for considering PJM's perspective and suggestions.

Sincerely,



Vincent P. Duane

cc: Mark Menezes, DOE
Bruce Walker, DOE
Sean Cunningham, DOE
Patricia Hoffman, DOE
Catherine Jereza, DOE

Johnsen, Steven (MA)

From: Bridget Lee <bridget.lee@sierraclub.org>
Sent: Friday, March 30, 2018 9:00 AM
To: Secretary Perry; Jereza, Catherine
Cc: Casey Roberts; Sanjay Narayan; Craig.Glazer@pjm.org; Steven.Pincus@pjm.org
Subject: Sierra Club's response to FirstEnergy request for emergency order
Attachments: 2018.03.30_Sierra Club letter to DOE.pdf

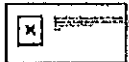
Mr. Perry and Ms. Jereza,

Attached please find the Sierra Club's response to the request for an emergency order under the Federal Power Act filed yesterday by FirstEnergy Solutions.

Thank you for your time and consideration.

Best regards,

Bridget



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**SIERRA
CLUB**

March 30, 2018

Via Electronic Mail and U.S. Mail

Hon. Rick Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington D.C. 20585
The.Secretary@hq.doe.gov

Catherine Jereza
Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington D.C. 20585
Catherine.Jereza@hq.doe.gov

Dear Mr. Perry and Ms. Jereza:

FirstEnergy Solutions Corp. ("FirstEnergy" or "FES") has submitted a request for an emergency order, pursuant to, *inter alia*, section 202(c) of the Federal Power Act. As envisioned by FirstEnergy, such order would result in utility customers paying above-market cost-of-service rates (including a guaranteed profit) for at least four years to the owners of all merchant coal and nuclear generating units in PJM that have at least 25 days' worth of onsite fuel. According to FirstEnergy, such payments are necessary to prop up those merchant coal and nuclear plants in order to ensure "resiliency" in the PJM system and avoid an "emergency" triggering the extraordinary powers of section 202(c). In reality, however, FirstEnergy has not shown that resiliency is at risk, or that the aging coal and nuclear units that may be retiring over the next seven years are needed to ensure such resiliency. Nor has FirstEnergy proposed a remedy that could be legally authorized under the Federal Power Act.

FirstEnergy's request here is nothing more than a slightly scaled down version of the Grid Resiliency Pricing proposal that the Federal Energy Regulatory

Commission (“FERC”) unanimously rejected less than three months ago. FirstEnergy has not and could not provide any basis for a different result to be reached here. As such, the Department can reject FirstEnergy’s legally flawed and factually unsupported request out of hand.

If the Department does not reject FirstEnergy’s request as not approvable on its face, we urge you to open up a formal docket, or undertake some other public proceedings to solicit public comments, so that the Department can reach a considered decision in this matter.¹ As set forth below, FirstEnergy’s application raises substantial legal and policy issues, will impose staggering costs on PJM ratepayers, and undermine competition and investor certainty in the PJM marketplace.

I. Procedure and Standing

In this letter, Sierra Club sets out its initial comments in response to FirstEnergy’s request. Should the Department not reject FirstEnergy’s request outright, we expect that it will open a docketed proceeding to address the request, as it did in response to the request from PJM Interconnection last year regarding the Yorktown units.² Sierra Club intends to fully participate in that proceeding through the submission of evidence and legal argument, and to seek rehearing should the Department issue an order outside the scope of its authority.

Sierra Club feels compelled to offer these initial comments only the day after FirstEnergy’s request was filed because, as FirstEnergy directly acknowledges in the request, it “likely will file for bankruptcy by the end of March 2018.”³ A bankruptcy filing may affect the rights of entities such as the Sierra Club to fully protect their interests in this matter.

Sierra Club has a substantial interest in this matter and would be adversely affected in numerous ways by an order along the lines of what FES proposes. FES’ proposed order would require PJM to negotiate contracts with dozens of coal and nuclear-power generation units across PJM’s territory, to provide those generation owners with recovery of all their costs, including a rate of return. These additional

¹ The Department has taken the position that its orders, under section 202(c), are “proceedings” within the meaning of section 313 of the Federal Power Act, 16 U.S.C. § 825l. That interpretation of the Act emphasizes the appropriateness of engaging in the procedural steps by which the Department conducts its other proceedings—most importantly, notice and an opportunity for interested parties to comment.

² DOE, Federal Power Act Section 202(c) – PJM Interconnection & Dominion Energy Virginia, 2017, at <https://www.energy.gov/oe/downloads/federal-power-act-section-202c-pjm-interconnection-dominion-energy-virginia-2017-0>.

³ FirstEnergy’s March 29, 2018 request to the Department at 8, 20.

costs would be passed on to PJM's ratepayers. The relief that FES seeks for all merchant units in PJM is extremely similar to that called for in the Grid Resiliency Pricing Rule last fall.⁴ That rule was projected to have costs of up to \$8.1 billion annually for PJM ratepayers.⁵

As of late 2016, Sierra Club had over 112,000 members who reside in the service territory of PJM and pay electricity bills to load-serving entities that buy power from PJM. These members would see higher electricity bills as a result of FirstEnergy's requested order. These financial harms to our members are germane to Sierra Club's mission, which includes addressing the quality of the human environment by promoting an affordable transition to clean energy. Sierra Club also has offices in PJM territory and is itself a ratepayer affected by any cost increases put in place as a result of an order responsive to FES' request.

In addition, Sierra Club members are affected by the pollution that will be produced by continued operations of coal-fired power plants that would otherwise retire in the near future. As described below, most of the retirements vaguely alluded to by FES are several years away. However, several units have already been cleared for retirement, such as FirstEnergy's Pleasants Power Station, which PJM has determined can close on January 1, 2019 without any adverse impacts on reliability.⁶ Sierra Club has members who are negatively affected by air and water pollution from Pleasants that would otherwise cease upon its deactivation, but would persist if the plant received additional compensation as envisioned in FES' request.

The Sierra Club has a demonstrated organizational commitment to the above-described interests. The Sierra Club's Beyond Coal Campaign seeks to reduce the pollution currently being produced by coal-fired power plants such as those that FES seeks to support. To that end, Sierra Club has participated in regulatory proceedings relating to all of the units listed in Attachment A to FES' request,

⁴ DOE, Notice of Proposed Rulemaking: Grid Resiliency Pricing Rule, available at <https://www.energy.gov/sites/prod/files/2017/09/f37/Notice%20of%20Proposed%20Rulemaking%20.pdf>.

⁵ See Robbie Orvis et al., The Department of Energy's Grid Resilience Pricing Proposal: A Cost Analysis (Oct. 2017), available at http://energyinnovation.org/wp-content/uploads/2017/12/20171025_Resilience-NOPR-Cost-Research-Note-UPDATED.pdf (Table 2: Annual Increase in Customer Costs by Region, Reading 4, Total).

⁶ Robert Walton, PJM greenlights FirstEnergy to deactivate coal plant units at Pleasants Power Station, UtilityDive (Mar. 22, 2018), at <https://www.utilitydive.com/news/pjm-greenlights-firstenergy-to-deactivate-coal-plant-units-at-pleasants-pow/519791/>.

seeking to mitigate their pollution, minimize costs that ratepayers must bear to support these plants, or both.

II. FirstEnergy's Application Does Not Describe Any Emergency Within the Meaning of Section 202(c) of the Federal Power Act.

1. Section 202(c) Confines Emergencies to Specific, Imminent Events.

Section 202(c) of the Federal Power Act provides the Department with authority over “the generation of electric energy” only “[d]uring the continuance of any war in which the United States is engaged,” or if “the [Department] determines that an emergency exists by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy, or of fuel or water for generating facilities, or other causes.” 16 U.S.C. § 824a(c)(1). The statute’s use of the present text—that an emergency “exists”—demands, at a minimum, that an emergency be present, certain, and immediate, rather than distant and contingent.

That certainty and immediacy is inherent in the statute’s fundamental requirement—an “emergency.” The Act does not define “emergency”; according to the dictionary, the word primarily demands “an unforeseen combination of circumstances or the resulting state that calls for *immediate* action.” Merriam Webster’s Dictionary 407 (11th ed. 2009) (emphasis added). An emergency, by definition, is not an anticipated event occurring, perhaps, years in the future; it describes an imminent, unavoidable threat.

The surrounding context emphasizes the exigency of the circumstances described by section 202(c)’s reference to an “emergency”: the authority granted by section 202(c) is, primarily, a war-time power. 16 U.S.C. § 824a(c) (authorizing orders during “continuance of any war in which the United States is engaged”). See *Jarecki v. G.D. Searle & Co.*, 367 U.S. 303, 307 (1961) (noting that statutory terms should be interpreted in context of nearby parallel terms “in order to avoid the giving of unintended breadth to the Acts of Congress”). An “emergency” under the statute is limited to circumstances that are similarly urgent: “a *sudden* increase in the demand for electric energy,” for example. 16 U.S.C. § 824a(c) (emphasis added). See *Richmond Power and Light v. Federal Energy Reg’y Comm.*, 574 F.2d 610, 615 (D.C. Cir. 1978) (holding that section 202(c) “speaks of ‘temporary’ emergencies, epitomized by wartime disturbances” and that statute is reasonably understood to exclude circumstances such as “dependence on imported oil”).

Section 202(c) is, moreover, expressly meant to address short-term, “temporary” conditions—it provides no authority to implement long-term policy preferences, in response to potential difficulties that may emerge years from now. *Id.* Congress underlined the limited scope of section 202(c) when enacting the provision. “This is

a temporary power designed to avoid a repetition of the conditions during the last war, when a serious power shortage arose. Drought and other natural emergencies have created similar crises in certain sections of the country; such conditions should find a federal agency ready to do all that can be done in order to prevent a breakdown in electric supply.” S. Rep. No. 74-621 at 49 (1935).⁷

The Department’s regulations confirm those limitations. They define an “emergency” as “an *unexpected* inadequate supply of electric energy” resulting from “the unexpected outage or breakdown of facilities,” which may result from “weather conditions, acts of God, or unforeseen occurrences not reasonably within the power of the affected ‘entity’ to prevent.” 10 C.F.R. § 205.370 (emphases added). Anticipated customer demand can be an emergency, only upon “a *sudden* increase” in such demand emphasis). Those examples reflect the limited nature of the emergencies encompassed by section 202(c): unusual, unforeseen, and unexpected events, with immediate and substantial consequences.

2. *The Structure of the Act Further Confirms That the Authority Conferred by Section 202(b) Is Limited to Unusual, Unexpected Circumstances.*

Other portions of the statute, outside section 202(c) itself, reinforce that section’s tightly limited scope. Section 202(b) confirms the constrained nature of the Department’s emergency powers under section 202(c). That section provides cabined authority (exercised by the Federal Energy Regulatory Commission, rather than the Department) to “direct a public utility ... to establish physical connection[,], ... sell energy, or exchange energy” with other persons, under normal, non-emergency conditions. 16 U.S.C. § 824a(b). The statute establishes specific standards and procedural requirements for such non-emergency orders. *Id.* Section 202(c) removes many of those requirements—but does so only during war-time or similarly extreme circumstances. 16 U.S.C. § 824a(c). *See Otter Tail Power Co. v. Fed. Power Comm.*, 429 F.2d 232, 233-34 (1970) (holding that section 202(c) “enables the Commission to react to a war or national disaster,” while section 202(b) “applies to a crisis which is likely to develop in the foreseeable future”). That structure establishes a clear divide between quotidian energy-system management (even where necessary to avert a future crisis), governed by section 202(b), and unusual, unforeseeable ‘emergencies,’ governed by section 202(c). Read within that structure, section 202(c) cannot apply to routine planning matters; such application would render section 202(b) unnecessary, and eviscerate its procedural and substantive requirements.

⁷ While Congress amended section 202(c) in 2015, it did not alter the Department’s basic grant of emergency authority; it only addressed occasions on which a Department order might produce a conflict with other laws. *See* H.R. Rep. No. 114-357 (2015).

Section 215 of the Federal Power Act, added in 2005, suggests additional boundaries on the Department's powers under section 202(c). Section 215 provides a detailed enforcement mechanism, with specified procedures, remedies, and timeframes, for federal reliability standards. *See generally* 16 U.S.C. § 825o. As the D.C. Circuit has recognized, the portion of the Federal Power Act that predates that section—which includes section 202(c)—did not provide the federal government with the power to enforce requirements designed to ensure broad, long-term reliability requirements. *Alcoa, Inc. v. FERC*, 564 F.3d 1342, 1344 (D.C. Cir. 2009) (noting that prior to the Energy Policy Act of 2005, “the reliability of the nation’s bulk-power system depended on participants’ voluntary compliance with industry standards”). Consequently, a bare violation of a federal reliability standard cannot suffice to provide the Department with “emergency” power to enforce that standard under section 202(c). Reading section 202(c) to permit direct enforcement of reliability requirements through emergency orders would bypass the limits and procedures that Congress enacted in section 215 to constrain such enforcement. *See California Independent System Operator Corp. v. FERC*, 372 F.3d 395, 401-2 (D.C. Cir. 2004) (“Congress’s specific and limited enumeration of [agency] power over [particular matter] in [one section of Federal Power Act] is strong evidence that [separate section] confers no such authority on [agency].”). Similarly, the Federal Power Act contains separate and independent provisions to address wholesale rates, and any perceived insufficiency of such compensation. 16 U.S.C. § 824d & 824e. Those provisions likewise indicate that any perceived inadequacy in the wholesale markets cannot be an emergency sufficient to provide the Department with authority under section 202(c).

3. *The Application Does Not Contain Information Sufficient to Support Any Finding that an Emergency Exists under Section 202(c).*
 - a. The Long-Term Resource-Allocation Concerns Described by FirstEnergy Are Not an “Emergency”.

FirstEnergy’s request describes no imminent, specific threat that could plausibly qualify as an “emergency” under the statute. The request asserts a need for “fuel diversity,” and other parties’ failure to pay FirstEnergy (and other merchant coal and nuclear generators) the “compensation” to which FirstEnergy believes itself to be entitled. Request 3. It cites no imminent shortfall in supply; it states only that certain units have dispatched in the past, and suggests that such units may be replaced by other sources of supply over the next seven years. *Id.* at 8-9. The Department has never exercised section 202(c) under similar circumstances; in every case, it has carefully established an imminent, unavoidable, and specific

short-fall in electricity supply, and issued narrowly tailored orders intended to address that specific shortfall.⁸

Even if those suggestions were adequately supported (and they are not, see Part III, below), they would not suffice to demonstrate an emergency under section 202(c). The Department has made clear that its authority, under section 202(c), may only be exercised to address “a *specific* inadequate power supply situation.” 10 C.F.R. § 205.371 (emphasis added). FirstEnergy’s application alleges no such specific situation; indeed, it acknowledges as much, in its failure to meaningfully address the application requirements specified in the Department’s regulations. Request 30-31. As the D.C. Circuit has noted, such “long-term” policy concerns, associated with “broad questions of resource allocation,” are not the proper subject of an emergency order under section 202(c). *Richmond Power & Light*, 574 F.3d at 615-16 (citation omitted).

b. The Entity Authorized to Address FirstEnergy’s Concerns Has Already Established That There Is No Need for Emergency, Near-Term Action.

The Federal Power Act (and other statutes) give the Federal Energy Regulatory Commission (and the National Electric Reliability Council) primary authority over the questions that FirstEnergy asks this Department to resolve by emergency order. *E.g.*, Request 7-8 & 27 (asserting that “wholesale pricing” is not providing “full[] compensa[tion]” to FirstEnergy and threat to long-term “reliability”), and 16 (claiming non-specific “reliability” concerns). See 16 U.S.C. §§ 824d & 824o. As noted above, that the Federal Power Act includes separate, closely cabined provisions addressing such matters strongly suggests that FirstEnergy’s stated concerns are not appropriately addressed through section 202(c). Rather, they are matters for FERC, and for NERC.

And FERC has already squarely addressed, and rejected, the primary rationale provided by FirstEnergy for an order. As FirstEnergy acknowledges, FERC very recently rejected a proposal by the Department to require certain grid operators, including PJM, to provide cost-based compensation to merchant coal and nuclear generators. See FERC, Grid Reliability and Resilience Pricing, Order Terminating Rulemaking Proceeding, Initiating New Proceeding, and Establishing Additional Procedures, 162 FERC ¶ 61,012 (Jan. 8, 2018). FERC found that existing tariffs

⁸ FirstEnergy cites the Department’s recent orders regarding the Yorktown power plant. Request 19. But as the Department made clear in response to Sierra Club’s requests for rehearing, those Orders were only issued after the Department found that the orders were the sole means of avoiding “immediate interrupt[ions of] service” to a substantial portion of Virginia, and were narrowly tailored to avoid those defined, established interruptions. Summary of Findings for Department of Energy Order No 202-17-4 at 6-7.

were not unjust and unreasonable, based on the evidence that no “past or planned generator retirements . . . [are] a threat to grid resilience. *Id.* at 15. FirstEnergy presents essentially the same evidence of a threat to resiliency that the Commission rejected just a few months ago. FirstEnergy did not even seek rehearing of the Commission’s January 8 order, but instead seeks to relitigate the issue in a forum it views as more favorable. The Department should not accept FirstEnergy’s invitation to reconsider an issue decided not even three months ago by a unanimous FERC.

Although FERC decided there was no urgent threat to the grid’s reliability to justify the extraordinary action proposed by the Department, it did initiate a docket to promptly and more comprehensively address whether additional steps are needed to ensure resilience. Jan. 8 Order at 17-20. While FirstEnergy asserts that FERC’s ongoing docket to examine the problem that FirstEnergy complains of is “too little, too late,” Request at 10, FERC’s ongoing proceeding is precisely the forum to address the kinds of longer-term issues that FirstEnergy alleges, such as a substantial portion of the generation fleet retiring over a number of years. Likewise, the energy and capacity market reforms that PJM is currently considering, and will shortly present to FERC, are the proper forum to address any shortcomings in market design.

4. *The Relief Requested by the Application Is Not “Just and Reasonable” Compensation Within the Meaning of Section 202(c).*

FirstEnergy asks the Department to require that it and other merchant coal and gas generators receive compensation for “operating expenses, costs of capital and debt, and a fair return on equity and investment,” and specifically prescribe “full cost recovery consistent with ratemaking standards and principles or (b) full recovery of all costs necessary to ensure continued operations.” Request 31-32. FirstEnergy asks that contracts setting out this cost recovery be negotiated within 15 days, a virtual impossibility given the enormous number of units for which FirstEnergy seeks compensation and the likelihood that none of these units, which have operated in competitive markets for years, are prepared to present cost-of-service data to PJM. Moreover, FirstEnergy asks the Department, “if PJM and the owners are unable to agree to the contractual terms” within 15 days, to itself “determine just and reasonable rates.” *Id.*

As an initial matter, the Department’s regulations specify that, should the affected parties be unable to reach an agreement as to rates, the Department “shall . . . refer the rate issues to the Federal Energy Regulatory Commission.” 10 C.F.R. § 205.376. The Department cannot, therefore, grant FirstEnergy’s request that it directly set “just and reasonable rates,” Request at 32. The determination of just and reasonable wholesale rates is a matter indisputably within FERC’s jurisdiction, not that of the Department.

More importantly, the Federal Power Act allows the Department only to implement “just and reasonable” terms. 16 U.S.C. § 824a(c)(1). And the “full recovery” of costs and a fair return on equity that FirstEnergy requests is (Request 31)—as FERC itself has suggested—not demonstrably just or reasonable. In its January 8, 2018 order in RM18-1-000, the Commission held that the proposed remedy to “allow all eligible resources to receive a cost-of-service rate regardless of need or cost to the system” had not been shown to be just and reasonable nor to avoid undue discrimination. *Id.* at 16. FirstEnergy’s proposed compensation here suffers from many of the same flaws in the proposal that FERC rejected, including but not limited to, the lack of any explanation of whether such compensation should be net of market revenues, lack of assurance that a unit is actually needed to serve load, and lack of cost controls imposed by the scrutiny of proper cost-based ratemaking.

III. PJM is reliable and will remain so for the foreseeable future.

As with the Proposed Grid Resiliency Rule, FirstEnergy’s request relies on unfounded claims that planned retirements of existing generating units threaten the “resiliency” of the PJM system. As Sierra Club and other Public Interest Organizations explained in their initial and reply comments on the Proposed Rule, and as FERC found in rejecting the Proposed Rule, there is no evidence that such generating unit retirements threaten the reliability or resiliency of the system.⁹ Instead, as PJM recently explained in response to questions from the U.S. Senate

PJM does not believe that operating outside of the market to preserve a particular class or type of generation is needed at this time for reliability. The markets have been resilient in attracting new investment. In addition, a variety of tools exist as a backstop should specific generation be needed in a particular area.¹⁰

Nothing in FirstEnergy’s request supports a different conclusion here.

Given that FirstEnergy’s thin support for its request closely resembles that presented to initiate FERC’s consideration of the Grid Resiliency Pricing Rule, Sierra Club refers the Department to the extensive record created in that case, in particular, the comments of Public Interest Organizations, cited above, and those of PJM Interconnection, which provide a detailed rebuttal of the arguments presented

⁹ January 8, 2018 FERC Order in Docket Nos. RM18-1-100 and AD18-7-000.

¹⁰ U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 1 from Sen. Lisa Murkowski (Jan. 23, 2018).

by FirstEnergy in its Request.¹¹ We write here to briefly address two of the more egregious arguments posited in FirstEnergy's request—FirstEnergy's claims that the 2014 Polar Vortex and the recent Bomb Cyclone somehow demonstrate the resiliency value of the aging coal and nuclear units in PJM.

1. The Polar Vortex does not justify FirstEnergy's request for DOE to prop up uneconomic coal and nuclear units in PJM.

FirstEnergy's continued misrepresentation of the events of the 2014 Polar Vortex is especially galling. Request 5, 9, 17. Indeed, while FirstEnergy claims that the Polar Vortex established the necessity of its coal and nuclear units, the Polar Vortex actually showed that on-site fuel storage does not ensure enhanced resiliency.

Of the 35,000 MW of generation capacity that failed to respond, nationwide, during the Polar Vortex, 26 percent was coal and 5 percent was nuclear. DOE Staff Report at 98. And while a significant amount of natural gas capacity also experienced outages, the majority of those outages related to frozen equipment, *not* fuel supply issues.¹² Within PJM, only a quarter of the record high 22% forced outage rate on January 7, 2014, was the result of fuel supply issues.¹³ Far more significant were other causes such as faulty plant maintenance and weather-related damage.¹⁴ PJM's subsequent analysis of the Polar Vortex also highlighted that two resources not reliant on fuel—wind energy and demand—overperformed during that time period.¹⁵

¹¹ Initial Comments of PJM Interconnection, L.L.C. on the United States Department of Energy Proposed Rule.

¹² NERC Polar Vortex Review, at 2, 13 (2014), available at http://www.nerc.com/pa/rrm/January%202014%20Polar%20Vortex%20Review/Polar_Vortex_Review_29_Sept_2014_Final.pdf.

¹³ PJM, Analysis of Operational Events and Market Impacts During the January 2014 Cold Weather Events at 25 (May 8, 2014), available at <http://www.pjm.com/~media/library/reports-notice/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-cold-weather-events.ashx> (hereinafter "PJM Jan. 2014 Cold Weather Events").

¹⁴ *Id.*

¹⁵ *Id.* at 19-21 (May 8, 2014). FirstEnergy repeatedly states that 9300 MW of gas generation was unavailable during the Polar Vortex. Request 5, 17. This claim is based on the isolated fact during one hour of the Polar Vortex, 9,300 MW of generation was unavailable due to interruptions in the natural gas supply. PJM Jan. 2014 Cold Weather Events at 26. FirstEnergy fails to mention, however, that the amount of coal that experienced outages at that same time was 13,700 MW. *Id.*

FirstEnergy ignores the fact that, although fossil-fueled generators failed to perform at a significant rate during the Polar Vortex, PJM successfully managed the threat without having to resort to blackouts, and “even on the day with the tightest power supplies – January 7 – *several steps remained before electricity interruptions might have been necessary.*”¹⁶ This is in large part because PJM, like each RTO, provides for a planning reserve margin precisely to ensure reliability in the event that many supply resources are impacted at the same time, as occurred during the Polar Vortex.

And FirstEnergy also fails to acknowledge the significance of the reforms carried out after the Polar Vortex, which aimed to address the high generator outage rates during the event. In response to the Polar Vortex, FERC held a technical conference focused on the impacts of the Polar Vortex and actions to respond.¹⁷ In November 2014, FERC issued an order to initiate a review of how each RTO was addressing “fuel assurances,” a “broad concept” intending to encompass “a range of generator-specific and system-wide issues, including the overall ability of an RTO’s/ISO’s portfolio of resources to access sufficient fuel to meet system needs and maintain reliability.”¹⁸ Each affected RTO responded to this directive, and ultimately adopted a series of reforms intended to address winter performance concerns. For example, PJM implemented a series of common-sense nonmarket reforms to improve generators’ preparedness for winter conditions.¹⁹ In the very next winter, despite even higher peak winter loads, PJM saw much lower forced outage rates than during the Polar Vortex, and improved performance among generators that had participated in pre-winter operational testing—one of the reforms PJM put in place following the Polar Vortex.²⁰ In addition, both PJM and ISO-NE modified their capacity market rules so as to ensure supplier performance during scarcity conditions.²¹

¹⁶ PJM Jan. 2014 Cold Weather Events at 4.

¹⁷ Notice of Technical Conference, “Winter 2013-2014 Operations and Market Performance in Regional Transmission Organizations and Independent System Operators” AD14-8 (February 21, 2014).

¹⁸ Order on Technical Conferences, 149 FERC ¶ 61,145 (Nov. 20, 2014).

¹⁹ See Protest of Public Interest Organizations, FERC Docket No. ER15-623-000, at Appendix B (summarizing PJM’s extensive measures to improve generator preparedness).

²⁰ See PJM Interconnection, 2015 Winter Report (May 13, 2015), at <http://www.pjm.com/-/media/library/reports-notice/weather-related/20150513-2015-winter-report.ashx?la=en>, at 5-6.

²¹ See Order on Proposed Tariff Revisions, 151 FERC ¶ 61,218 (2015); Order on Tariff Filing and Instituting Section 206 Proceeding, 147 FERC ¶ 61,172 (2014).

While FirstEnergy suggests that the Capacity Performance program somehow “failed” because it did not spur the development of new gas supply contracts,

Finally, FirstEnergy's Request would support a fleet of merchant coal units that, in fact, *performed quite poorly* during the Polar Vortex.²² Analysis by Synergy Energy Economics of hourly generation data reveals that, after initially ramping up to meet growing demand, the coal fleet's performance began to decline even before the peak hour on January 6, 2014.²³ By PJM's winter peak on the evening of the 7th, coal output had fallen by more than 2,500 MW relative to its peak from the prior day.²⁴ Even among units that remained online, most coal units provided less output at the season peak than they had the previous day.

2. The recent Bomb Cyclone weather event and resulting NETL Report do not justify FirstEnergy's request for DOE to prop up uneconomic coal and nuclear units in PJM.

In an apparent effort to distinguish its request from the rejected Proposed Rule, FirstEnergy relies heavily on a recently released National Energy Technology Laboratory report ("NETL Report") that purports to find that coal-fired generating units were critical to preserving "resiliency" in PJM and other RTOs/ISOs during the "Bomb Cyclone" winter event in late December to early January.²⁵ The NETL Report's claim about the resiliency of existing coal units in PJM is based on the fact that during the Bomb Cyclone, coal generation increased more in comparison to the level of generation from December 1 through 26, 2017 than did other forms of generation. FirstEnergy extrapolates from the report that the impacts of the Bomb Cyclone show that "immediate action" to prop up uneconomic coal and nuclear units is "critical."²⁶

FirstEnergy's reliance on the NETL Report is unavailing because that report does not actually measure resilience in PJM. Instead, as Michael Goggin at Grid

Request 11, the company does not address whether that program has, in fact, increased reliability and resiliency of the grid by incentivizing many coal and gas units to weatherize and improve their preparedness for winter events.

²² Public Interest Organization Initial Comments, RM18-1-000, Appendix E, at E-15.

²³ *Id.*

²⁴ *Id.*

²⁵ FirstEnergy Request at 3-8, citing National Energy Technology Laboratory, Reliability, Resilience, and the Coming Wave of Retiring Baseload Units Volume I: The Critical Role of Thermal Units During Extreme Weather Events (Mar. 13, 2018) ("NETL Report"), available at <https://www.netl.doe.gov/research/energy-analysis/search-publications/vuedetails?id=2594>

²⁶ FirstEnergy Request at 3.

Strategies LLC has explained,²⁷ “the report employs a flawed metric of resilience that does not indicate the performance of different types of generators, but instead simply finds which energy sources are the most expensive.” In particular, coal generation was able to increase significantly during the Bomb Cyclone only because those coal units were too costly to operate earlier in December and, therefore, were either idle or only partially utilized. The fact that those idle or partially utilized coal plants increased their generation during the Bomb Cyclone shows only that those coal generators are uncompetitive unless electricity and gas prices increase significantly. Nothing in the NETL Report shows that such increased generation, or the substantially increased costs that it would entail, are necessary to ensure the resiliency or reliability of the PJM system. All bulk electric systems will have some generation that is more expensive and is therefore used primarily during peak load conditions. In PJM’s current generation portfolio many merchant coal plants function (inefficiently) as peaking units, but when those units retire others will take their place as PJM always procures enough generation capacity to meet its reserve margin requirement. In fact, PJM is currently oversupplied and has substantially more generating capacity than it needs.

The NETL Report is unhelpful to FirstEnergy’s effort to take advantage of the Bomb Cyclone because the report fundamentally misses the point. As Michael Goggin explains:

A true examination of resilience would assess actual performance in keeping the lights on for customers. Such an effort should focus on the transmission and distribution system failures that cause the vast majority of customer outages. Such an analysis would also include a range of threats to the power system.

Neither the NETL Report or FirstEnergy’s request provide such an analysis. Instead, they rely on a simplistic assessment that shows that many coal units in PJM are expensive, but fails to support FirstEnergy’s claim that they are critically needed.

In an effort to bolster its case, FirstEnergy seizes on a statement in the NETL Report that demand in PJM “could not have been met without coal” to claim that propping up coal units that are planning to retire by 2025 is necessary.²⁸ But that claim in the NETL Report, which focuses on capacity rather than generation, is meaningless because it relies on the unrealistic assumption that no other capacity

²⁷ Michael Goggin, Fossil Lab Misses Mark in Cold Weather “Resilience” Report, (Mar. 28, 2018), available at <http://sustainableferc.org/fossil-lab-misses-mark-in-cold-weather-resilience-report/>.

²⁸ FirstEnergy Request at 4, citing NETL Report at 17.

would replace the retiring coal.²⁹ In reality, substantial amounts of new generation has come online as coal units have retired over the past eight years, as PJM recently detailed:

On the resource side, it should be noted that although PJM saw about 22,000 MW of coal units retire since 2010, the capacity market attracted more than 37,000 MW of new generation since 2007, of which more than 21,000 MW of new generation was placed in service between 2010 and 2017. This has resulted in a current PJM reserve margin of 29.1 percent, which is well above the targeted reserve margin of 16.6 percent for 2017 and 16.1 percent for 2018.³⁰

There is no reason to believe that future coal and nuclear unit retirements that may occur by 2025 would not similarly be met with new resources, including renewables, demand response, and energy storage.

Echoing the NETL Report, FirstEnergy proclaims serious concerns about the fact that many of the coal units that dispatched during the Bomb Cyclone are expected to retire in the coming years.³¹ In support, FirstEnergy notes that PJM's President has recently testified that 1,410 MWs of nuclear generation and 3,688 MWs of coal generation that operated during the Bomb Cyclone is scheduled to retire in the next five years.³² The Company neglects to mention, however, that PJM went on to explain that those retiring coal units had a significantly higher forced outage rate (ranging from 16% to 31.7%) during the Bomb Cyclone than the 8% to 11.7% forced outage rate for the non-retiring coal units during that same time.³³ In other words, on the metric that FirstEnergy claims to be concerned

²⁹ NETL Report at 17 (noting that "any retiring units that were dispatched during the event would have to be replaced.").

³⁰ U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 1 from Sen. Lisa Murkowski (Jan. 23, 2018).

³¹ FirstEnergy Request at 7.

³² FirstEnergy Request at 7, citing U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Mike Lee (Jan. 23, 2018).

³³ U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Mike Lee (Jan. 23, 2018).

about—performance during extreme weather events—the coal units that the company wants to force customers to prop up fail.³⁴

Ultimately, FirstEnergy's attempt to use the Bomb Cyclone as an excuse to bail out its coal and nuclear plants fails because the PJM systems performance during that weather event shows that there is no looming resiliency crisis. In fact, PJM itself found that:

During the recent cold snap, PJM did not call a performance assessment interval, a 72-hour maintenance recall or any transient shortage intervals. However, the system was well tested and, as detailed in this report, there were indicators of improved performance of generating resources since 2014. Overall, the grid and the generation fleet performed well. Even during peak demand, PJM had excess reserves and capacity.³⁵

The available evidence plainly shows that in a time of major changes to the energy mix in our country, PJM is ensuring system reliability and the resilience to keep the lights on even during significant weather events such as the Bomb Cyclone. No basis has been provided for disrupting that system with substantial sums of out-of-market payments that would help prop up some of the oldest and least reliable coal units in the system while filling the coffers of the merchant generating companies that own those units.

³⁴ PJM also noted that it “does not see any challenge to reliability or fuel diversity from the announced retirements.” U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Mike Lee (Jan. 23, 2018).

³⁵ PJM INTERCONNECTION, PJM COLD SNAP PERFORMANCE DEC. 28, 2017 TO JAN. 7, 2018 (Feb. 26, 2018), available at <http://www.pjm.com/-/media/library/reports-notices/weather-related/20180226-january-2018-cold-weather-event-report.ashx>. PJM has also noted that it had 5,400 MWs of emergency demand response available during the Bomb Cyclone that it did not end up needing to utilize. U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Lisa Murkowski (Jan. 23, 2018).

IV. CONCLUSION

For the foregoing reasons, Sierra Club asks the Department of Energy to promptly deny the request of FirstEnergy Solutions.

Sincerely,

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1000 Independence Ave., S.W.
Washington, D.C. 20585

Rick C. Giannantonio
General Counsel
FirstEnergy Solutions Corp.
76 South Main Street
Akron, OH 44308

Craig Glazer
VP, Federal Government Policy
PJM Interconnection, L.L.C.
1200 G St., N.W., Ste. 600
Washington, D.C. 20005

Johnsen, Steven (MA)

Document 12

From: Kelli O'Neill (b) (6)
Sent: Saturday, March 31, 2018 1:01 AM
To: Secretary Perry
Subject: RE: NO Bailout for Ohio Nuke Plants

Dear Secretary of Energy Perry,

While you may share the same name as the nuclear power plant that has operated for over 50 years, from which I (b) (6), along the shores of one of the world's major freshwater sources, Lake Erie, I certainly hope you do not share the same views as the Perry Nuclear Plant's owners/operators, First Energy Solutions! (NOTE: For all intents and purposes, any reference here to PNPP can also be said of the Davis-Besse Nuclear Power Plant on the western end of Ohio as well for this discussion.)

I am one of the luckiest people ever, in that for (b) (6) along the southern shores of one of our Great Lakes, Lake Erie, in a wee township called Madison-On-The-Lake, once known as the Onion capital of our country, now the Nursery capital, due to its fertile sandy loam soil. Vacationers from several hours away and as close as Cleveland, Youngstown and Pittsburgh, renting or owning a summer cottage on the lake shore, flock to its beaches every Summer and inject plenty of disposable income into the local economy here; it's basically a Summer Tourist Town.

One huge dark shadow falls upon the area - and we're reminded of it at 11:00 AM the first Wednesday of every month when the Perry Nuclear Power Plant Emergency Evacuation Sirens are tested. (b) (6)

Thirty-some years ago, (b) (6) I knew the Perry Nuclear Power Plant was not a benefit to this area and its people, which is why I voiced my concerns about the plant's being granted its full power license. The electricity generated by PNPP goes to the grid, not directly to us, yet we are forced to live with all the inherent risks, such as radioactive waste, just to name one. For instance, the first study conducted by then CEI, later to become Centerior, then FirstEnergy, the operating utility company and part owner of the PNPP, was Not a seismological study to determine earthquake faults. With Fukushima still burning and polluting the Pacific Ocean, one now knows how crucial this study would have been at the time, BEFORE the first shovelful of soil was removed to break ground. No, the local utility instead conducted a socio-economic study to determine the prime location of a reticent population, and they found it right here in Lake County, Ohio.

My protests, and those of 83% of the homeowners here in Madison, fell on deaf ears, and the PNPP was granted its Full Power License by the NRC in November of 1987. Thirty years and several earthquakes later, after the plant owners fought so desperately for the PUCO to grant DeRegulation of the Electric Industry here in Ohio, against our very wishes and warnings that the utility company would not find a worthy competitor, here we are - FirstEnergy says they can no longer afford to own and operate the plant unless you, Sir, give them the funds to float them along. Honestly, FE has been playing this game for thirty years or more that I am aware of. What's the definition of insanity - oh, right - continue doing the very same behaviors and expecting a different outcome... well, that's exactly how CEI/Centerior/FES has conducted themselves to the PUCO, to the NRC, to us - the ratepayers - and now to You and our federal government. I am SO not surprised to hear them crying and pleading for a bailout. On one hand, while they were claiming the value of the plant was one particular lower score or number, so they needn't pay a lot of taxes, their other hand was digging into Ratepayers' pockets, claiming the plant's value to

be so incredibly high they had to charge additional fees to maintain and operate it. And Every Time, our PUCO granted them whatever rate hike they requested.

And now, when they themselves sought to have electric generation deregulated by the PUCO, when we said it wouldn't work, they are claiming they can no longer afford to manage and operate PNPP because there is no competition in Ohio, and due to the affordability and increased availability of alternative energy sources such as natural gas, wind and solar, and because manufacturing jobs have left the area, therefore the need for additional electricity never came to fruition, the reason for building PNPP in the first place, as I understand it. Huh. You don't say...

So FirstEnergy Solutions now wants out of the electric generation business altogether, and frankly, I don't blame them. FirstEnergy has consistently, for Over 30 years, made bad decisions all along, and all along, like a spoiled brat, has gotten their way, EVERY TIME. Nothing is their fault, it seems, if you listen to their PR people, and yet we are expected to continue to cover their mistakes by opening our wallets...Again. Not this time - not while we, the residents, the ratepayers, pay the highest or second highest utility rates in our country, and have to live literally downwind of such grave risks to our fertile soil, our fresh, clean air, and our beautiful, fresh water.

I am Imploring you to REFUSE FirstEnergy any bailout, Secretary Perry, that would keep the Perry Nuclear Power Plant in operation in any way, shape or form, and keep ANY owner of the PNPP from charging us ratepayers for their decades-long bad decisions. And strongly suggest to the NRC to not extend PNPP's operating license, no matter who the owner/operator is or is to become.

With Perry's closing, will our area lose jobs? Yes, it will. Am I pleased to hear that? No, I am not. Yet, anyone working at the PNPP knew when they took those jobs that the plant was only licensed initially through 2017. Perhaps the Department of Energy, under your guidance, can help subsidize training for current nuclear power plant workers to learn Solar or Wind technologies so as to become employable again soon. THAT I would consider a nice solution. Any investment in one's education and training is never a waste in my opinion.

Thank you for your very careful consideration in this extremely important matter, Secretary Perry, and I look forward to your written reply to my letter at your soonest convenience.

All the best,

Kelli O'Neill
(b) (6)

From: [Lotto, Adrienne](#)
To: [Bittner, Kathy \(CONTR\)](#)
Subject: FW: Letter from Advanced Energy Management Alliance
Date: Monday, April 02, 2018 11:50:06 AM
Attachments: [AEMAFirstEnergy4.2.18.pdf](#)

FYI

Adrienne Lotto

Chief of Staff for Assistant Secretary Bruce J. Walker
Office of Electricity
1000 Independence Avenue, SW
Room 8H-033
Washington, DC 20585
Tel: (202) 586-1117

From: Walker, Bruce
Sent: Monday, April 02, 2018 11:11 AM
To: Lotto, Adrienne <Adrienne.Lotto@hq.doe.gov>
Subject: FW: Letter from Advanced Energy Management Alliance

From: Katherine Hamilton
Sent: Monday, April 2, 2018 11:10:18 AM (UTC-05:00) Eastern Time (US & Canada)
To: Secretary Perry
Cc: Walker, Bruce
Subject: Letter from Advanced Energy Management Alliance

Dear Secretary Perry, attached please find a letter from Advanced Energy Management Alliance in support of PJM's response to the FirstEnergy 202(c) petition. Feel free to reach out should you have any questions regarding our position.

Best regards,

Katherine Hamilton

Katherine Hamilton
Executive Director

Advanced Energy Management Alliance
Office: 202-524-8832
Cell: (b) (6)



PO Box 65491
Washington, DC 20035
p 202.580.8284
e info@aem-alliance.org
aem-alliance.org

By Electronic Mail

April 2, 2018

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: FirstEnergy Request for Emergency Order Pursuant to Federal Power Act Section 202(c)

Dear Secretary Perry:

The Advanced Energy Management Alliance (“AEMA”)¹ writes in support of the PJM Interconnection position regarding the FirstEnergy 202(c) petition. AEMA is a trade association under Section 501(c)(6) of the Federal tax code whose members include national distributed energy resource companies and advanced energy management service and technology providers, including demand response (“DR”) providers, as well as some of the nation’s largest demand response and distributed energy consumers.

AEMA’s mission is to advocate for policies that empower and compensate customers appropriately in a manner that contributes to a more efficient, cost-effective, resilient, reliable, and environmentally sustainable grid and we have continually

¹ For more information, see AEMA website: <http://aem-alliance.org>

supported the inclusion of these resources into wholesale markets to achieve electricity cost savings for consumers, contribute to system reliability, and ensure balanced price formation.

The resources AEMA represents are part of the diversity that is crucial to operating the grid in a reliable manner. We believe that any attempt to increase payments to only a sub-set of power plants will simply drive up costs on the entire grid—both for consumers and for innovative technologies such as demand response, distributed energy resources, and distributed energy storage, that increasingly provide flexible and resilient services to the system. The Federal Energy Regulatory Commission (“FERC”) has cited multiple studies finding that distributed energy resources contribute to reliability and to resilience by providing “greater reliability through consumer reliance upon distributed energy resources to provide resilience from bulk power and distribution service interruptions” and “power outage mitigation or critical power support during outages (resilience) and power quality improvement (enhanced reliability).”²

AEMA has engaged³ at FERC and in states throughout various resilience proceedings, making a strong case for inclusion of distributed resources for reliability and

² FERC citing *Responses in a High Distributed Energy Resources Future*, at 26-28 (Report 1, Nov. 2015), https://emp.lbl.gov/sites/all/files/lbnl-1003823_0.pdf (Berkeley Lab Report); DNV-GL, *A Review of Distributed Energy Resources: New York Independent System Operator*, at 18 (Sept. 2014) (DNV-GL Report), http://www.nyiso.com/public/webdocs/media_room/publications_presentations/Other_Reports/Other_Reports/A_Review_of_Distributed_Energy_Resources_September_2014; U.S. Department of Energy, *The Potential Benefits of Distributed Generation and Rate-related Issues that May Impede Their Expansion: A Study Pursuant to Section 1817 of the Energy Policy Act of 2005* (Feb. 2007), <https://www.ferc.gov/legal/fed-sta/exp-study.pdf>; IEA, *Repowering Markets: market design and regulation during the transition to low-carbon power systems*, at 33 (2016)

³ AEMA filed Comments (<http://aem-alliance.org/aema-files-comments-doe-nopr-ferc/>) and Reply Comments to the DOE NOPR (<http://aem-alliance.org/aema-files-reply-comments-doe-nopr/>) as well as comments in Puerto Rico regarding resilience (<http://aem-alliance.org/aema-makes-resilience-recommendations-puerto-rico-commission/>).

resilience as critical to maintaining a flexible, cost-effective, and reliable system. We agree with PJM that their system, because of the diversity of resources participating in their ISO, is not facing issues of reliability. AEMA remains convinced that the technologies and services that our consumers and innovators are providing in PJM are part of the reason for that reliability. Thus, we support the position of PJM in opposition to the FirstEnergy petition.

Please do not hesitate to contact me at 202-524-8832 or Katherine@aem-alliance.org should you have any questions regarding this letter. Thank you for the consideration.

Sincerely,



Katherine Hamilton
Executive Director
Advanced Energy Management Alliance



1200 G Street, NW • Suite 800 • Washington, DC 20005
Tel: 202.898.5700 • Fax: 717.260.7165

Robert A. Weishaar, Jr.
Direct Dial: 202.898.5700
Direct Fax: 717.260.1765
bweishaar@mcneeslaw.com

April 2, 2018

Via Electronic Mail

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
the.secretary@hq.doe.gov

Mr. Bruce Walker
Assistant Secretary, DOE Office of Elec. Delivery & Energy Reliability
Office of Electric Reliability and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
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Ms. Catherine Jereza
Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
catherine.jereza@hq.doe.gov

RE: Motion of PJM Industrial Customer Coalition to Intervene

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Attached is PJM Industrial Customer Coalition's ("PJMICC") Motion to Intervene in the proceeding concerning FirstEnergy Solutions Corp.'s ("FES") Request For Emergency Action Under Section 202(c) of the Federal Power Act. PJMICC is comprised of several of the nation's largest manufacturers, with significant electricity-consuming facilities in Pennsylvania, Ohio,

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The Honorable James Richard Perry, et al.
April 2, 2018
Page 2

Indiana, West Virginia, and other states in the PJM Region. PJMICC member companies strongly oppose the FES Request for emergency action. If the Request is not denied outright, all interested parties should be given 60 days to file comments, as requested by the Electric Power Supply Association and other organizations on Friday, March 30, 2018.

Respectfully submitted,

McNEES WALLACE & NURICK LLC



By

Robert A. Weishaar, Jr.

Counsel to the PJM Industrial Customer Coalition

RAW/db

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

**Request for Emergency Order Pursuant
To Federal Power Act Section 202(c) By
FirstEnergy Solutions Corp.**

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)
)

DOE Docket No. _____

**MOTION OF PJM INDUSTRIAL CUSTOMER
COALITION TO INTERVENE**

The PJM Industrial Customer Coalition (“PJMICC”), by and through its counsel, hereby moves to intervene in the above-captioned proceeding and protests the March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act Section 202(c) by FirstEnergy Solutions Corp. (“FES”), pursuant to Rules 211 and 214 of the Federal Energy Regulatory Commission’s (“Commission”) Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214.

I. PROCEDURAL BACKGROUND

On March 29, 2018, FES issued a letter (“Request”) to the Honorable James Richard Perry, Secretary of Energy, requesting that the Secretary use emergency authority under Section 202(c) of the Federal Power Act to find that an emergency condition exists in the PJM Interconnection, L.L.C. (“PJM”) territory requiring immediate intervention. Specifically, FES requests that the Secretary (a) order “certain existing nuclear and coal-fired generators . . . to enter into contracts” with PJM to generate and transmit energy, capacity, and ancillary services to “maintain the stability of the electric grid” and (b) order PJM to “promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide” to energy markets and the public. FES served the Request on over 100 owners of generation, transmission, or distribution assets, state public utility commissions, and others.

II. MOTION TO INTERVENE

PJMICC is an ad hoc association of large consumers of electricity that have facilities located throughout the PJM region. PJMICC members include large manufacturers in the steel, cement, paper, chemical, pharmaceutical, consumer products, and other industries, and large institutional consumers including universities and hospitals. If the Request is granted, cost responsibility for payments made pursuant to the Emergency Order may be recovered from consumers throughout the PJM region, including PJMICC member companies. PJMICC strongly opposes the Request and reserves the right to supplement this preliminary pleading to explain, in detail, why the Request is unjustified and unlawful, and should not be granted.

PJMICC moves for intervention under Rule 214 of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure.¹ Consistent with Rule 214(b)(2), PJMICC has a significant and direct interest in the outcome of this proceeding. Further, as an organization representing many of the largest electricity consumers in the PJM footprint, PJMICC's participation is in the public interest.

¹ Federal Power Act Section 202(c) and the Department indicate that the Federal Power Act and the Commission's Rules of Practice and Procedure should be used for procedural guidance in Emergency Order proceedings. Guidance published on the Department's website points to the Commission's Rules where DOE regulations at 10 C.F.R. § 205.370, et. seq., are silent. *See, e.g.,* DOE Answer to Procedural Questions Concerning Rehearing of DOE Order, *District of Columbia Public Service Commission*, Docket No. E0-05-01 (December 30, 2005) at 2. Additionally, the Department has taken the position that the procedure for judicial review of emergency orders under Section 202(c) of the Federal Power Act must be secured through Section 313 of that Act, 16 U.S.C. § 8251. *See, e.g.,* Order No. 202-05-3, *District of Columbia Public Service Commission*, Docket No. E0-05-01 (December 20, 2005) at 11-12. The plain language of Section 202(c)(5) of the Federal Power Act, enacted in 2016, reinforces this principle. Where, as here, a proceeding exists under Chapter 12 of the Federal Power Act, the Commission's Rules of Practice and Procedure apply. *See* 16 U.S. Code § 825g(b) (FPA § 308) ("All hearings, investigations, and proceedings under this chapter shall be governed by rules of practice and procedure to be adopted by the Commission.").

III. SERVICE OF DOCUMENTS

The following persons are designated by PJMICC to receive service and communications on its behalf with regard to this proceeding:

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Susan E. Bruce
Kenneth R. Stark
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kstark@mcneeslaw.com
mgarber@mcneeslaw.com

IV. STATEMENT OF OPPOSITION

Rule 214(b)(1) requires the movant to state its preliminary position. PJMICC opposes the relief sought by FES. Overwhelming evidence, not cited in the Request, demonstrates that no need exists for the requested relief and certainly no emergency exists that would justify application of Section 202(c) of the Federal Power Act. PJMICC is developing a comprehensive rebuttal to FES' Request, and will be submitting that rebuttal to the Department.

PJMICC respectfully urges the Department to give all interested parties sufficient time to present their responses to the FES Request before ruling on the Request.² To that end, PJMICC supports the request that was filed Friday, March 30, 2018, by the Electric Power Supply Association and other organizations requesting a 60-day comment period.

² Obviously, PJMICC would not oppose an outright rejection of the Request, without a notice and comment period.

V. CONCLUSION

For the reasons set forth above, PJMICC respectfully requests that the Department grant PJMICC's motion to intervene in this proceeding and, if the Department does not reject the FES Request outright, provide all interested parties with 60 days to file comments on the Request.

Respectfully submitted,

McNEES WALLACE & NURICK LLC

/s/ Robert A. Weishaar, Jr.

By _____

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kstark@mcneeslaw.com
mgarber@mcneeslaw.com

Counsel to the PJM Industrial Customer Coalition

Dated: April 2, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have this day served, via first-class mail, electronic transmission, or hand-delivery the foregoing upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, DC this 2nd day of April, 2018.

/s/ Robert A. Weishaar, Jr.

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Kenneth R. Carretta
Deputy General Counsel

Law Department
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email: kenneth.carretta@pseg.com



April 2, 2018

VIA COURIER

The Honorable James Richard Perry
Secretary of Energy United States
Department of Energy 1000
Independence Avenue, S.W.
Washington, DC 20585

**Re: Request for Emergency Order Pursuant to Federal Power Act Section 202(c) Of
First Energy Solutions/Intervention and Comments of PSEG Companies**

Dear Secretary Perry:

On March 29, 2018, FirstEnergy Solutions (along with its identified affiliates) ("FES") submitted an application ("Application") pursuant to Section 202(e) of the Federal Power Act ("FPA"), Section 301(b) of the Department of Energy ("DOE") Organization Act, seeking a finding by the Secretary of Energy ("Secretary") that an emergency condition exists in the footprint of the PJM Interconnection, L.L.C. ("PJM"). The Application contends that immediate intervention by the Secretary, in the form of a Section 202(c) emergency order is needed to support resiliency and the continued operation of fuel-secure resources.

The PSEG Companies¹ agree the Application identifies an issue that requires immediate attention within the PJM footprint. PJM is faced with the recently announced closure of more 4,048 megawatts of FES nuclear generation and is faced with the risk of losing other nuclear plants in the future. Not only does nuclear generation provide resiliency to the generation fleet but it also provides the largest source of carbon-free generation in the region. The loss of nuclear generation to the PJM footprint would severely undermine the achievement of environmental goals designed to reduce the emission of greenhouse gases. Further, in addition to their fuel-secure and zero-emission attributes, nuclear plants are already hardened against many potential

¹ The "PSEG Companies" consist of PSEG Power LLC, PSEG Energy Resources & Trade LLC and Public Service Electric and Gas Company. In addition to submitting comments, the PSEG Companies also move to intervene in this proceeding to the extent that a formal request for intervention is required. A formal request to intervene and a further description of the PSEG Companies and their interests in this proceeding is set forth in Attachment A hereto.

threats² and provide other national security benefits³. To date, the PSEG Companies do not believe that either PJM or FERC has given this issue the proper level of priority or attention. The PSEG Companies thus urge policy makers to take immediate steps to assure that the attributes of nuclear generation are properly valued in market rules so that nuclear generation retains its role in supporting a resilient and secure electric grid and continues to serve as an important economic driver in the communities they serve.

Finally, the PSEG Companies reserve their rights to supplement their response under 10 C.F.R. § 205.374, and provide any other information relevant to the action requested in the Application.

Respectfully submitted,

PSEG Power LLC
PSEG Energy Resources & Trade LLC
Public Service Electric and Gas Company

By:



Kenneth R. Carretta
Deputy General Counsel
PSEG Services Corporation
80 Park Plaza – T5
Newark, New Jersey 07102
(973) 430-6462
Kenneth.Carretta@pseg.com

Cc: Bruce J. Walker, Assistant Secretary, DOE Office of Electricity Delivery & Energy Reliability
Patricia A. Hoffman, Principal Deputy Assistant Secretary, DOE Office of Electricity Delivery & Energy Reliability
FirstEnergy Solutions Corp.
Federal Energy Regulatory Commission
Delaware Public Service Commission
Illinois Commerce Commission
Indiana Utility Regulatory Commission

² See *Grid Reliability and Resilience Pricing*, RM18-1-000, "Reply Comments of the PSEG Companies," Affidavit of Jeremy C. Carl, p. 10 ("Nuclear has an advantage in this world because nuclear power plants are already hardened against risks and have been designed with safety and security (physical and cyber) in mind from the ground up.")

³ See *Grid Reliability and Resilience Pricing*, RM18-1-000, "Reply Comments of the PSEG Companies," Affidavit of Jeremy C. Carl, p. 13 ("In addition to our work in non-proliferation, the civilian nuclear enterprise dramatically strengthens our military capability as well, another nuclear attribute that is not priced into the market.")

Kentucky Public Service Commission
Maryland Public Service Commission
Michigan Public Service Commission
State of New Jersey Board of Public Utilities
North Carolina Utilities Commission
Public Utilities Commission of Ohio
Pennsylvania Public Utilities Commission
Tennessee Public Utility Commissions
Commonwealth of Virginia State Corporation Commission
Public Service Commission of West Virginia
New York Public Service Commission
Public Service Commission of the District of Columbia
PJM Interconnection
ReliabilityFirst Corp.
SERC Reliability Corporation
AES Warrior Run
Avon Lake
B L England
Beaver Valley
Birchwood Power
Braidwood Generation Station
Brandon Shores
Brunner Island
Byron Generating Station
Calvert Cliffs Nuclear Power Plant
Cardinal
Chalk Point
Chambers Cogeneration LP
Chesterfield
Cheswick Power Plant
Clover
Conemaugh
Conesville
Cooper
Covington Facility
CP Crane
Davis Besse
Dickerson
Donald C Cook
Dover
Dresden Generating Station
East Bend
Edgecombe Genco
FirstEnergy Bruce Mansfield
FirstEnergy Fort Martin Power Station
FirstEnergy Harrison Power Station

FirstEnergy Pleasants Power Station
FirstEnergy W H Sammis
FirstEnergy Solutions Corp.
General James M Gavin
H L Spurlock
Herbert A Wagner
Homer City Generating Station
Indian River Generating Station
Ingredion Incorporated
J M Stuart
James River Genco
John E Amos
Joliet 9
Joliet 29
Keystone
Killen Station
Kincaid
LaSalle Generating Station
Limerick
Logan Generating Company
Longview Power Plant
Luke Mill
The Honorable James Richard Perry
Mecklenburg Power Station
Miami Fort
Mitchell (WV)
Morgantown Generating Plant
Mountaineer
Mt Storm
North Aima
Orrville
Oyster Creek
P H Glatfelter
P H Glatfelter Chillicothe Facility
Painesville
Peach Bottom
Perry
Powerton
PSEG Hope Creek Generating Station
PSEG Salem Generating Station
Quad Cities Generating Station
Radford Army Ammunition Plant
Rockport
Spruance Genco
Surry
TalenEnergy Montour

TalenEnergy Susquehanna
Tennessee Eastman Operations
Three Mile Island
University of Notre Dame
Virginia City Hybrid Energy Center
W H Zimmer
Waukegan
Wausau Paper Middletown
Whitewater Valley
Will County
Yorktown

Attachment A: Description of the PSEG Companies and Request to Intervene

The PSEG Companies consist of PSEG Power LLC (PSEG Power), PSEG Energy Resources & Trade LLC (PSEG ER&T) and Public Services Electric and Gas Company (PSE&G) and are each wholly owned, direct and indirect subsidiaries of Public Service Enterprise Group Incorporated ("PSEG"). The principal and executive offices of PSEG are located at 80 Park Plaza, Newark, New Jersey 07102. PSEG is a public utility holding company engaged in, among other things, the generation of electric energy, and the transmission, distribution and sale of electricity and natural gas through its subsidiaries.

The PSEG Companies respectfully submit that they have vital interests in this proceeding and that their participation will serve the public interest. In addition, some or all of the PSEG Companies (or their subsidiaries) may qualify as "entities" that have been "designated as a potential source of emergency assistance or as a potential supplier of transmission services" within the meaning of 10 C.F.R. § 205.374 of the DOE's regulations.

PSEG Power is a wholesale energy supply company that integrates its generation asset operations with its wholesale energy, fuel supply, energy trading and marketing, and risk management functions through three principal subsidiaries: (i) PSEG Nuclear LLC ("PSEG Nuclear"), which owns and operates nuclear generating stations; (ii) PSEG Fossil LLC ("PSEG Fossil"), which develops, owns, and operates domestic fossil-fuel fired and other non-nuclear generating stations; and (iii) PSEG ER&T, which markets the capacity and production of PSEG Nuclear's and PSEG Fossil's generating stations. PSE&G is the largest electric and gas utility located in the state of New Jersey and is a PJM transmission owner.

PSEG Power's subsidiary, PSEG Nuclear, is the operator of two nuclear generating plants – Salem and Hope Creek -- located in Salem County, New Jersey. Exelon Corporation is a co-owner with PSEG Nuclear of the Salem units. In addition, PSEG is the non-operator co-owner, also with Exelon Corporation, of an interest in the Peach Bottom nuclear plant located in southeastern Pennsylvania. In total, PSEG Nuclear owns approximated 3,630 MWs of nuclear generation capability. All three of the nuclear plants are identified in Attachment A to the Application. PSEG ER&T and PSE&G also have significant interests at stake. PSEG ER&T's activities in the PJM market and as a supplier of load in the PJM region could be affected by the outcome of this proceeding. PSE&G's operations and the customers located in its service territory could also be affected.

Johnsen, Steven (MA)

From: Robert Rutkowski (b) (6)
Sent: Monday, April 02, 2018 12:36 PM
To: Secretary Perry
Subject: Dying Coal- and Nuclear-Powered Utility Asks Again for Government Bailout

Rick Perry
Secretary of Energy
1000 Independence Ave. SW
Washington DC 20585
202-586-5000
The.Secretary@hq.doe.gov

Re: Dying Coal- and Nuclear-Powered Utility Asks Again for Government Bailout

Dear Secretary:

FirstEnergy, a utility struggling to stay alive in the dying coal and nuclear industries, is once again looking for a bailout from government regulators.

Ohio-based FirstEnergy has asked the Department of Energy to take emergency action to keep its coal-fired and nuclear power plants open. The plants can't compete with cheaper renewable energy and natural gas on the open market. This comes on the heels of the company announcing that it will close three nuclear plants by 2022.

In a letter to you, FirstEnergy claimed that closing its power plants would jeopardize reliability of the electric grid. Sound familiar?

In November, FirstEnergy and other companies lobbied the Trump administration to bail out their industries by requiring regional grids to buy a percentage of power from coal and nuclear plants, even when less expensive sources are available. The scheme was shot down by the Federal Energy Regulatory Commission.

The bailout was the brainchild of Robert Murray, CEO of a Murray Energy, a major supplier of coal to FirstEnergy. Robert Murray was a major donor to President Trump's campaign, and his wish list set the agenda for many of the administration's rollbacks of environmental regulations.

Under the Freedom of Information Act, EWG and American Oversight petitioned for release of all communications between you and coal and utility companies, including Murray Energy and FirstEnergy. They are still waiting on a response.

This has nothing to do with maintaining smooth operation of the electric system. It has everything to do with FirstEnergy's perilous finances. On Monday, FirstEnergy Solutions, the division of the company that sells power on the open market filed for bankruptcy. According to Greentech Media, FirstEnergy lost \$6.2 billion in 2016.

As before, regional grid operators were quick to dismiss FirstEnergy's claim that loss of their plants would threaten the reliability of the electric system. PJM, the operator that oversees the largest regional wholesale electricity market in the nation – including the states where FirstEnergy operates – explained:

This is not an issue of reliability. There is no immediate emergency. Diversity of the fuel supply is important, but the PJM system has adequate power supplies and healthy reserves in operation today, and resources are more diverse than they have ever been. Nothing we have seen to date indicates that an emergency would result from the generator retirements.

Asking for a bailout from taxpayers or ratepayers is old hat for FirstEnergy, which has also asked Ohio regulators for help. The company's bailout proposal in 2016 would have cost ratepayers \$4 billion, according to the Institute for Energy Economics and Financial Analysis. State regulators approved the scheme, but federal regulators said no, reasoning that it would have distorted wholesale market prices.

Many utilities are quick to deride subsidies for solar panels and wind farms, but have no qualms with seeking government subsidies to keep coal and nuclear on life support. In the competition for cheaper, cleaner electricity, coal and nuclear have already lost to solar and wind. FirstEnergy's deathbed plea is further proof that the era of coal and nuclear power dominance is over.

Thank you for the opportunity to bring these remarks to your attention.

Yours sincerely
Robert E. Rutkowski

cc:
House Democratic Whip Office
Legislative Correspondence Team

(b) (6)

P/F: (b) (6)
E-mail: (b) (6)



April 3, 2018

Via Electronic Mail

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W. Washington, DC 20585
the.secretary@hq.doe.gov

Mr. Bruce Walker
Assistant Secretary, DOE Office of Elec. Delivery & Energy Reliability
Office of Electric Reliability and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W. Washington, DC 20585
bruce.walker@hq.doe.gov

Ms. Catherine Jereza
Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W. Washington, DC 20585
catherine.jereza@hq.doe.gov

RE: Motion of American Municipal Power Inc. to Intervene

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Attached is American Municipal Power, Inc.'s ("AMP") Motion to Intervene and Statement of Opposition in the proceeding concerning FirstEnergy Solutions Corp.'s ("FES") Request For Emergency Action Under Section 202(c) of the Federal Power Act. AMP is a nonprofit Ohio corporation that provides electric power and services to municipal members with electric utility systems across a nine state footprint, including: Ohio, West Virginia, Pennsylvania, Michigan, Virginia, Kentucky, Indiana, Maryland and Delaware. AMP strongly opposes the FES Request for emergency action. If the Request is not denied outright, all interested parties should be given 60

DELAWARE DELAWARE MUNICIPAL ELECTRIC CORPORATION **INDIANA** CANNELTON **KENTUCKY** BENTHAM • BEEBA • PADUCAH • PARIS • PRINCETON • WILLIAMSTOWN
MARYLAND BERLIN **MICHIGAN** CLINTON • COLDWATER • HILLSDALE • MARSHALL • UNION CITY • WYANDOTTE **OHIO** AMHERST • ARCADIA • ARCANTUM • BEACH CITY • BLANCHESTER
BLOOMDALE • BOWLING GREEN • BRADNER • BRIARCLIFF • BRYAN • CAMEY • CELINA • CLEVELAND • CLYDE • COLUMBIANA • COLUMBUS • CUSTAR • CUYAHOGA FALLS • CYGNET • DELTA
DESHER • DOVER • EDGERTON • ELDOBRADO • ELMORE • GALLON • GENOA • GEORGETOWN • GLOSTER • GRAPTON • GREENWICH • HAMILTON • HASKINS • HOLIDAY CITY • HUBBARD
HUDSON • HURON • JACKSON • JACKSON CENTER • LAKETW • LEBANON • LODI • LUCAS • MARSHALLVILLE • MENDON • MILAN • MINSTER • MONROEVILLE • MONTPELIER • NAPOLEON • NEW
BREMEN • NEW KNOXVILLE • NEWTON FALLS • NILES • OAK HARBOR • OBERLIN • OHIO CITY • ORRVILLE • PAINESVILLE • PEMBERTON • PIONEER • PIQUA • PLYMOUTH • PROSPECT • REPUBLIC
SEVILLE • SHELBY • SHILOH • SOUTH VIENNA • ST. CLAIRSVILLE • ST. MARYS • SYCAMORE • TIPP CITY • TOLEDO • VERSAILLES • WADSWORTH • WAPAKONETA • WAYNESFIELD • WELLINGTON
WESTERVILLE • WHARTON • WOODSFIELD • WOODVILLE • YELLOW SPRINGS **PENNSYLVANIA** BERLIN • BLAKELY • CATAWISSA • DUNCANNON • EAST CONEMAUGH • ELLWOOD CITY
EPHRATA • GIRARD • GOLDSBORO • GROVE CITY • HATHFIELD • HOOVERVILLE • KUTZTOWN • LANSDALE • LEHIGHTON • LEWISBERY • MIDDLETOWN • NEW WASHINGTON • PERRASKE
QUAKERTOWN • ROYALTON • SAINT CLAIR • SCHUYLKILL HAVEN • SMITHPORT • SUMMERHILL • WAMPUM • WATSONTOWN • WEATHERLY • ZEPHONIE **VIRGINIA** BEDFORD • DANVILLE • FRONT
ROYAL • MARTINSVILLE • RICHMOND **WEST VIRGINIA** NEW MARTINSVILLE • PHILIPPI

days to file comments, as requested by the Electric Power Supply Association and other interested parties on Friday, March 30, 2018.

/s/ Lisa G. McAlister

American Municipal Power, Inc.
Lisa G. McAlister
SVP & General Counsel for Regulatory Affairs
Kristin Rothey
Assistant Deputy General Counsel
1111 Schrock Road, Suite 100
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krothey@ampppartners.org

UNITED STATES OF AMERICA
BEFORE THE DEPARTMENT OF ENERGY

Request for Emergency Order Pursuant
To Federal Power Act Section 202(c) By
FirstEnergy Solutions Corp.

)
)
)
)
)

DOE Docket No. _____

MOTION OF AMERICAN MUNICIPAL POWER, INC. TO INTERVENE

American Municipal Power, Inc. ("AMP") by and through its counsel, hereby moves to intervene in the above-captioned proceeding and protests the March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act Section 202(c) by FirstEnergy Solutions Corp. ("FES"), pursuant to Rules 211 and 214 of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214.

I. PROCEDURAL BACKGROUND

On March 29, 2018, FES sent a "Request for Emergency Order Pursuant to Federal Power Act Section 202(c) ("Request") to the Honorable James Richard Perry, Secretary of Energy, requesting that the Secretary use emergency authority under Section 202(c) of the Federal Power Act to find that an emergency condition exists in the PJM Interconnection, L.L.C. ("PJM") territory requiring immediate intervention and extraordinary relief. FES requested that the Secretary issue an order directing (1) "certain existing nuclear and coal-fired generators . . . to enter into contracts" with PJM to generate and transmit energy, capacity, and ancillary services to "maintain the stability of the electric grid" and (2) PJM to "promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide" to energy markets and the public. FES requested that the Secretary "immediately issue the emergency order described above." Request at 33.

II. MOTION TO INTERVENE

AMP is a nonprofit Ohio corporation organized in 1971 with members in nine states: Ohio, West Virginia, Pennsylvania, Michigan, Virginia, Kentucky, Indiana, Maryland and Delaware. The

members of AMP are political subdivisions of their respective domicile states that own and operate municipal electric utility systems, and the Delaware Municipal Electric Corporation, a political subdivision and joint action agency of the State of Delaware that itself has nine municipal members. AMP's primary purpose is to assist its member communities in meeting their electric and energy needs. This purpose is served in a number of ways, including ownership of electric generation, scheduling and dispatch of member-owned generation, power supply, transmission arrangements, and energy efficiency and demand response measures that AMP makes with third parties at the request of and on behalf of its members. AMP serves as a full or partial requirements supplier for most of its 135 members.

If FES's requested relief is granted, cost responsibility for payments made pursuant to the Emergency Order must ultimately be recovered from customers. Although FES did not address how much those costs will amount to, how such costs should be recovered or from whom, the amounts have been estimated to be staggering, increasing costs to consumers, including AMP members and their customers, by \$8.1 billion annually, which is a roughly 19% increase in total costs.¹ As such, and consistent with Rule 214(b)(2), AMP has a significant and direct interest in the outcome of this proceeding. Additionally, as an organization representing many load serving entities in the PJM region, AMP's participation is in the public interest. Accordingly, AMP moves for intervention under Rule 214 of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure.² AMP strongly opposes the

¹ See, "The Department of Energy's Grid Resilience Pricing Proposal: A Cost Analysis" at 4, available at: http://energyinnovation.org/wp-content/uploads/2017/12/20171025_Resilience-NOPR-Cost-Research-Note-UPDATED.pdf.

² Federal Power Act Section 202(c) and the Department indicate that the Federal Power Act and the Commission's Rules of Practice and Procedure should be used for procedural guidance in Emergency Order proceedings. Guidance published on the Department's website points to the Commission's Rules where DOE regulations at 10 C.F.R. § 205.370, et. seq., are silent. See, e.g., DOE Answer to Procedural Questions Concerning Rehearing of DOE Order, *District of Columbia Public Service Commission*, Docket No. E0-05-01 (December 30, 2005) at 2. Additionally, the Department has taken the position that the procedure for judicial review of emergency orders under Section 202(c) of the Federal Power Act must be secured through Section 313 of that Act, 16 U.S.C. § 825l. See, e.g., Order No. 202-05-3, *District of Columbia Public Service Commission*, Docket No. E0-05-01 (December 20, 2005) at 11-12. The plain

Request and reserves the right to supplement this preliminary pleading to explain, in detail, why the Request is unjustified and unlawful, and should not be granted.

III. SERVICE OF DOCUMENTS

The following persons are designated by AMP to receive service and communications on its behalf with regard to this proceeding:

Lisa G. McAlister, Senior Vice President and General Counsel for Regulatory Affairs*
Kristin V. Rothery, Asst. Deputy General Counsel*
Chris Norton, Director of Market Regulatory Affairs*
AMERICAN MUNICIPAL POWER, INC.
1111 Schrock Road, Suite 100
Columbus, OH 43229
Telephone: (614) 540-1111
Fax: (614) 540-1080
E-mail: lmcalister@amppartners.org
krothery@amppartners.org
cnorton@amppartners.org
* Electronic service requested

IV. STATEMENT OF OPPOSITION

Rule 214(b)(1) requires the movant to state its preliminary position. AMP opposes the relief sought by FES. Overwhelming evidence, not cited in the Request, demonstrates that no need exists for the requested relief and certainly no emergency exists that would justify application of Section 202(c) of the Federal Power Act. In fact, FES itself states that there were “numerous signs for many years that the emergency was coming.” Request at 1. AMP respectfully requests that the Department reject the Request outright. In the alternative, AMP respectfully urges the Department to give all interested parties sufficient time to present their responses to the FES Request before ruling on the Request.³ To that end, AMP supports the request that was filed

language of Section 202(c)(5) of the Federal Power Act, enacted in 2016, reinforces this principle. Where, as here, a proceeding exists under Chapter 12 of the Federal Power Act, the Commission's Rules of Practice and Procedure apply. See 16 U.S. Code § 825g(b) (FPA § 308) (“All hearings, investigations, and proceedings under this chapter shall be governed by rules of practice and procedure to be adopted by the Commission.”)

³ AMP would not oppose an outright rejection of the Request, without a notice and comment period.

Friday, March 30, 2018, by the Electric Power Supply Association and other organizations requesting a 60-day comment period.

V. CONCLUSION

For the reasons set forth above, AMP respectfully requests that the Department grant AMP's motion to intervene in this proceeding and, if the Department does not reject the FES Request outright, provide all interested parties with 60 days to file comments on the Request.

Respectfully submitted,

/s/ Lisa G. McAlister

American Municipal Power, Inc.
Lisa G. McAlister, Senior Vice President and General
Counsel for Regulatory Affairs
Kristin V. Rothery, Asst. Deputy General Counsel
1111 Schrock Road, Suite 100
Columbus, Ohio 43229
Telephone: 614-540-6400
Email: lmcalister@ampppartners.org
krothey@ampppartners.org

Dated: April 3, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have this day served, via electronic transmission the foregoing upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Columbus, Ohio this 3rd day of April, 2018.

/s/ Lisa G. McAlister

Lisa G. McAlister

Senior Vice President and General Counsel for
Regulatory Affairs

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Columbus, Ohio 43229

(614) 540-1111

lmcalister@ampppartners.org

krothey@ampppartners.org

4818-8213-4624, v. 4

From: Lotto, Adrienne
To: Jereza, Catherine; Bittner, Kathy (CONTR); Harris, Aleisha (CONTR)
Subject: FW: Citizens Utility Board Motion to Intervene
Date: Tuesday, April 03, 2018 1:21:50 PM
Attachments: CUB Motion to Intervene in Emergency Order 4.3.18.pdf

202 file

Adrienne Lotto

Chief of Staff for Assistant Secretary Bruce J. Walker
Office of Electricity
1000 Independence Avenue, SW
Room 8H-033
Washington, DC 20585
Tel: (202) 586-1117

From: Walker, Bruce
Sent: Tuesday, April 03, 2018 12:58 PM
To: Lotto, Adrienne <Adrienne.Lotto@hq.doe.gov>
Subject: FW: Citizens Utility Board Motion to Intervene

From: Eric DeBellis
Sent: Tuesday, April 3, 2018 12:57:42 PM (UTC-05:00) Eastern Time (US & Canada)
To: Secretary Perry; Walker, Bruce; Jereza, Catherine
Subject: Re: Citizens Utility Board Motion to Intervene

My apologies. Please disregard the prior email. CUB intends to file this attached, updated version instead.

On Tue, Apr 3, 2018 at 11:56 AM, Eric DeBellis <edebellis@citizensutilityboard.org> wrote:

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Attached is Citizens Utility Board's Motion to Intervene in the proceeding concerning FirstEnergy Corp.'s Request for Emergency Action Under Section 202(c) of the Federal Power Act.

Respectfully submitted,

Eric DeBellis
Attorney & Policy Analyst
Citizens Utility Board
312-263-4282
edebellis@citizensutilityboard.org

--

Eric DeBellis
Attorney & Policy Analyst
Citizens Utility Board
312-263-4282 ext. 108
edebellis@citizensutilityboard.org

Request for Emergency Order Pursuant)
To Federal Power Act Section 202(c) By)
FirstEnergy Solutions Corp.) **DOE Docket No. _____**

the health, welfare and prosperity of all the citizens of this State by ensuring effective and democratic representation of utility consumers before the Illinois Commerce Commission, the Federal Energy Regulatory Commission, the Federal Communications Commission, the courts, and other public bodies and by providing for consumer education on utility service prices and on benefits and methods of energy conservation.” 220 ILCS 10/2. If the Request is granted, payments made pursuant to the Emergency Order may be recovered from consumers throughout the PJM region, which includes the Commonwealth Edison (“ComEd”) territory in Illinois. CUB opposes the Request and reserves the right to supplement this preliminary pleading to explain, in detail, why the Request would result in unjust and therefore should be rejected.

CUB moves to intervene under Rule 214 of the Federal Energy Regulatory Commission’s (“Commission”) Rules of Practice and Procedure. As Rule 214(b)(2) requires, CUB has a significant and direct interest in this proceeding’s outcome. Further, CUB’s role as an advocate for Illinois ratepayers makes CUB’s participation in the public interest. *See* 220 ILCS 10/2 (declaring that the purposes of the Act creating CUB “shall be deemed a statewide interest and not a private or special concern”).

III. SERVICE OF DOCUMENTS

CUB designates the following persons to receive service and communications on its behalf with regard to this proceeding:

Kristin Munsch
Deputy Director
Citizens Utility Board
309 W. Washington St., Suite 800
Chicago, IL 60606
(312) 263-4282
kmunsch@citizensutilityboard.org

Eric DeBellis
Attorney & Policy Analyst
Citizens Utility Board
309 W. Washington St., Suite 800
Chicago, IL 60606
(312) 263-4282
edebellis@citizensutilityboard.org

IV. STATEMENT OF OPPOSITION

Rule 214(b)(1) requires the movant to state its preliminary position. CUB opposes granting the relief FES seeks. The available evidence, not cited in this Request, demonstrates that no emergency condition exists and the requested relief is unnecessary.

CUB respectfully urges the Department to give all interested parties sufficient time to present their responses to the Request before the Department rules on the Request. Accordingly, CUB supports the Electric Power Supply Associations' request, filed Friday, March 30, 2018, seeking a 60-day comment period.

V. CONCLUSION

For the foregoing reasons, CUB respectfully requests that the Department grant CUB's motion to intervene in this proceeding and, if the Department does not reject the FES Request outright, provide all interested parties 60 days to file comments on the Request.

Respectfully submitted,

By /s/ Eric DeBellis

Kristin Munsch
Deputy Director
Citizens Utility Board
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Chicago, IL 60606
(312) 263-4282
kmunsch@citizensutilityboard.org

Eric DeBellis
Attorney & Policy Analyst
Citizens Utility Board
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Chicago, IL 60606
(312) 263-4282
edebellis@citizensutilityboard.org

Dated: April 3, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have this 3rd day of April, 2018, served via first-class mail, electronic transmission, or hand delivery the foregoing upon each person designated on the official service list compiled by the Secretary in this proceeding.

/s/ Eric DeBellis

Eric DeBellis
Attorney & Policy Analyst
Citizens Utility Board
309 W. Washington St., Suite 800
Chicago, IL 60606
(312) 263-4282
edebellis@citizensutilityboard.org



STATE OF DELAWARE
DEPARTMENT OF STATE
DIVISION OF THE PUBLIC ADVOCATE

820 N. FRENCH STREET, 4TH FLOOR
WILMINGTON, DELAWARE 19801

29 SOUTH STATE STREET
DOVER, DELAWARE 19901

1.888.607.2427
WWW.PUBLICADVOCATE.DELAWARE.GOV

April 3, 2018

VIA ELECTRONIC MAIL

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
the.secretary@hq.doe.gov

Mr. Bruce Walker
Assistant Secretary, DOE Office of Elec. Delivery & Energy Reliability
Office of Electric Reliability and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
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bruce.walker@hq.doe.gov

Ms. Catherine Jereza
Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
catherine.jereza@hq.doe.gov

RE: Motion of the Delaware Division of the Public Advocate to Intervene

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Attached is the Delaware Division of the Public Advocate's ("DPA") Motion to intervene in the proceeding concerning FirstEnergy Solutions Corp.'s ("FES") Request for Emergency Action under Section 202(c) of the Federal Power Act. The Delaware DPA is an agency of the State of Delaware statutorily charged to advocate for the lowest reasonable rates for consumers and small businesses

consistent with the maintenance of adequate utility service. Further, the Delaware DPA is empowered to appear on behalf of the interest of consumers in Delaware's state courts, the federal courts and federal administrative and regulatory agencies and commissions in matters involving rates, service and practices of public utilities.

The Delaware DPA strongly opposes the FES Request for emergency action. If the Request is not denied outright, all interested parties should be given 60 days to file comments, as requested by the Electric Power Supply Association and other organizations on Friday, March 30, 2018.

Respectfully submitted,

Delaware Division of the Public Advocate

By: Andrew C. Slater,
Public Advocate

II. MOTION TO INTERVENE

The Delaware Division of the Public Advocate (“Delaware DPA”) is an agency of the State of Delaware statutorily charged to advocate for the lowest reasonable rates for consumers and small businesses consistent with the maintenance of adequate utility service. Further, the Delaware DPA is empowered to appear on behalf of the interest of consumers in Delaware’s state courts, the federal courts and federal administrative and regulatory agencies and commissions in matters involving rates, service and practices of public utilities.

If FE’s requested relief is granted, cost responsibility for payments made pursuant to the Emergency Order will be recovered from consumers throughout the PJM region, including Delaware residents. The Delaware DPA strongly objects to the request and reserves the right to supplement this preliminary pleading to explain, in detail, because the request is onerous, unjustified and unlawful, and should not be granted. In addition, FE’s requested relief includes not only its assets but also impermissibly demands the same relief for the entire nuclear and coal generation fleet without any demonstration that such relief is warranted.

The Delaware DPA moves for intervention under Rule 214 of the Federal Energy Regulatory Commission’s (“Commission”) Rules of Practice and Procedure. In conformity with Rule 214(b)(2), the Delaware DPA has a significant and direct interest in the outcome of this proceeding as every electricity customer in this State will be immediately and irreparably affected. The Delaware DPA’s participation in this proceeding is in the public interest.

III. SERVICE OF DOCUMENTS

The following persons are designated by the Delaware DPA to receive service and communications on its behalf with regard to this proceeding:

Andrew C. Slater
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Ruth Ann Price
Delaware Deputy Public Advocate
Carvel State Office Building
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Regina A. Iorii
Deputy Attorney General
Delaware Department of Justice
820 N. French Street, 6th Floor
Wilmington, DE 19801
Telephone: (302) 577-8159
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IV. STATEMENT OF OPPOSITION

Rule 214(b)(1) requires the movant to state its preliminary position. The Delaware Division of the Public Advocate opposes the relief sought by FES. FES has not provided that it or other coal and nuclear resources cited in their request needs the requested relief. FES has not presented a credible scintilla of evidence to show that an emergency exists of any magnitude and definitely not one that justifies the application of Section 202(c) of the Federal Power Act. On January 8, 2018, the Federal Energy Regulatory Commission (“FERC”) initiated a proceeding, *Grid Resilience in Regional Transmission Organizations and Independent System Operators*, Docket No. AD18-7-000, to comprehensively and thoughtfully examine the issues of resilience presented in FES’s request. FES demand for emergency relief intends to circumvent FERC’s current deliberative proceeding in which all interested parties have an opportunity to be heard.

Delaware DPA respectfully urges the Department to give all interested parties sufficient time to present their responses to the FES request before ruling on the request. The Delaware DPA urges the Department to deny the request as no emergency has been shown. In the alternative, Delaware DPA encourages the Department to order a 60-day comment period.

V. CONCLUSION

For the reasons set forth above, DE DPA respectfully requests that the Department grant its motion to intervene in this proceeding. Further, the Delaware DPA requests the Department reject the FES request, or, in the alternative, provide all interested parties with 60 days to file comments.

Respectfully submitted,

/s/ Andrew C. Slater

By _____

Andrew C. Slater
Delaware Public Advocate
29 S. State Street
Dover, DE 19901
Telephone: (302)241-2550
Email: Andrew.slater@state.de.us

Ruth Ann Price
Delaware Deputy Public Advocate
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Regina A. Iorii
Deputy Attorney General
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Wilmington, DE 19801
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Email: regina.iorii@state.de.us

Dated: April 3, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have this day served, via first-class mail, electronic transmission, or hand-delivery the foregoing upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Dover, Delaware this 3rd day of April, 2018.

/s/ Andrew C. Slater

By _____

Andrew C. Slater
Delaware Public Advocate
29 S. State Street
Dover, DE 19901
Telephone: (302)241-2550
Email: Andrew.slater@state.de.us

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

**Request for Emergency Order Pursuant
to Federal Power Act Section 202(c) of
FirstEnergy Solutions Corp.**)
)
)

DOE Docket No. _____

MOTION TO INTERVENE OF THE DELAWARE PUBLIC SERVICE COMMISSION

The Delaware Public Service Commission (“Delaware PSC”) hereby moves to intervene in the above-captioned proceeding and protests the March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act Section 202(c) by FirstEnergy Solutions Corp. (“FES”), pursuant to Rules 211 and 214 of the Federal Energy Regulatory Commission’s (“Commission”) Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214.

I. PROCEDURAL BACKGROUND

On March 29, 2018, FES issued a letter (“FES Request”) to the Honorable James Richard Perry, Secretary of the Department of Energy (“Department”), requesting that the Secretary use emergency authority under Section 202(c) of the Federal Power Act to find that an emergency condition exists in the PJM Interconnection, L.L.C. (“PJM”) territory requiring immediate intervention. FES requests two forms of relief: that the Secretary (a) order “certain existing nuclear and coal-fired generators . . . to enter into contracts” with PJM to generate and transmit energy, capacity, and ancillary services to “maintain the stability of the electric grid” and (b) order PJM to “promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide” to energy markets and the public. The FES

Request was served on over 100 owners of generation, transmission, or distribution assets, state public utility commissions, including the Delaware PSC, and others.

II. MOTION TO INTERVENE

The Delaware PSC is an agency of the State of Delaware responsible for ensuring safe, reliable, and reasonably priced utility services for Delaware consumers.¹ The Delaware PSC is a State Commission as defined in Section 1.101(k) of the Commission's Rules of General Applicability, 18 C.F.R. §1.101(k).

If FE's requested relief is granted, cost responsibility for payments made pursuant to the Emergency Order will be recovered from consumers throughout the PJM region, including Delaware residents. The Delaware PSC strongly objects to the FES Request and reserves the right to supplement this preliminary pleading to explain, in detail, why the FES Request is unsupported, unlawful, and should be rejected.

The Delaware PSC moves for intervention under Rule 214 of the Commission's Rules of Practice and Procedure.² In conformity with Rule 214(b)(2), the Delaware PSC has a significant and direct interest in the outcome of this proceeding as every electricity customer in this State will be immediately and severely affected. The Delaware PSC's participation in this proceeding is in the public interest.

¹ See 26 Del. C. §§ 202(a), 303(a).

² The Commission's Rules of Practice and Procedure should be used for procedural guidance in Emergency Order proceedings. See Motion of PJM Industrial Customer Coalition to Intervene, filed in this proceeding on April 2, 2018 at n. 1.

III. SERVICE OF DOCUMENTS

The following persons are designated by the Delaware PSC to receive service and communications on its behalf with regard to this proceeding:

Matthew Hartigan
Acting Executive Director
Delaware Public Service Commission
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Matthew.Hartigan@state.de.us
PSC_FERC@state.de.us

Joe DeLosa
Public Utility Analyst
Delaware Public Service Commission
861 Silver Lake Boulevard
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(302) 736-7519
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IV. STATEMENT OF OPPOSITION

Rule 214(b)(1) requires the movant to state its preliminary position. The Delaware PSC opposes the departure from competitive markets sought by FES. The FES Request failed to make the requisite showing of an emergency under the definition of Section 202(c) of the Federal Power Act and instead misinterpreted available data to support its “general dissatisfaction with the PJM markets or its competitive position therein.”³ In a similar proceeding, responding to nearly identical arguments,⁴ the Commission utilized its relevant industry expertise and determined that, “[w]hile some commenters allege grid resilience or reliability issues [exist] due to potential retirements of particular resources, we find that these

³ PJM letter to The Honorable James Richard Perry, filed in this proceeding on March 30, 2018, at n. 1.

⁴ See Comments of FES et al. in support of the Grid Reliability and Resilience Pricing Notice of Proposed Rulemaking. Commission Docket No. RM18-1. Oct. 23, 2017.

assertions do not demonstrate the unjustness or unreasonableness of the existing RTO/ISO tariffs. In addition, the extensive comments submitted by the RTOs/ISOs do not point to any past or planned generator retirements that may be a threat to grid resilience.”⁵ The Commission also established additional proceedings to ensure that all facets of grid reliability and resilience were thoroughly vetted in an orderly and transparent fashion.

Delaware PSC respectfully urges the Department to give all interested parties sufficient time to present their responses to the FES Request before issuing a determination. Accordingly, the Delaware PSC supports the request that was filed in this proceeding on March 30, 2018, by the Electric Power Supply Association and other organizations seeking a 60-day comment period.

V. CONCLUSION

For the reasons set forth above, the Delaware PSC respectfully requests that the Department grant its motion to intervene in this proceeding. Further, the Delaware PSC asks that the Department reject the FES Request, or, in the alternative, provide all interested parties with 60 days to file comments.

April 3, 2018

Respectfully submitted,

/s/ Matthew Hartigan

Matthew Hartigan
Acting Executive Director
Delaware Public Service Commission
861 Silver Lake Boulevard
Dover, Delaware 19904
(302) 736-7500
Matthew.Hartigan@state.de.us

⁵ 162 FERC ¶ 61,012 (2018) at P 15. (internal citations omitted).

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Dover, D.E. this 3rd day of April, 2018.

/s/ Joseph DeLosa III

Joseph DeLosa III

Delaware Public Service Commission



State of New Jersey
DIVISION OF RATE COUNSEL
140 EAST FRONT STREET, 4TH FL.
P.O. BOX 003
TRENTON, NEW JERSEY 08625

PHIL MURPHY
Governor

SHEILA OLIVER
Lt. Governor

STEFANIE A. BRAND
Director

April 3, 2018

Via Overnight and Electronic Mail

The Honorable Rick Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
the.secretary@hq.doe.gov

Mr. Bruce Walker
Assistant Secretary, DOE Office of Elec. Delivery & Energy Reliability
Office of Electric Reliability and Energy Reliability
U.S. Department of Energy
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Ms. Catherine Jereza
Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
catherine.jereza@hq.doe.gov

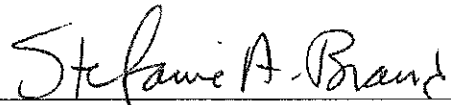
Re: Motion of New Jersey Division of Rate Counsel to Intervene

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Attached is New Jersey Division of Rate Counsel's ("NJRC") Motion to Intervene in the proceeding concerning FirstEnergy Solutions Corp.'s ("FES") Request For Emergency Action Under Section 202(c) of the Federal Power Act. NJRC is the administrative agency charged under New Jersey Law with the general protection of the interests of utility ratepayers. *N.J.S.A.*

52:27E-50 *et seq.* NJRC is also a member of PJM Interconnection L.L.C., which will be affected by this FES request. NJRC opposes this FES request for emergency action. If this request is not denied outright, there should be a 60 day comment period, as requested by the Electric Power Supply Association *et al* on March 30, 2018.

Respectfully submitted,

A handwritten signature in black ink that reads "Stefanie A. Brand". The signature is written in a cursive style with a horizontal line underneath the name.

Stefanie A. Brand, Esq.

Director, New Jersey Division of Rate Counsel

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

**Request for Emergency Order Pursuant)
To Federal Power Act Section 202(c) By)
FirstEnergy Solutions Corp.) DOE Docket No. _____**

MOTION OF NEW JERSEY DIVISION OF RATE COUNSEL TO INTERVENE

The New Jersey Division of Rate Counsel (“NJRC”), by and through its counsel, hereby moves to intervene in the above-captioned proceeding and protests the March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act Section 202(c) by FirstEnergy Solutions Corp. (“FES”), pursuant to Rules 211 and 214 of the Federal Energy Regulatory Commission’s (“Commission”) Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214.

I. PROCEDURAL BACKGROUND

On March 29, 2018, FES issued a request by letter (“Request”) to the Honorable Rick Perry, US Secretary of Energy, requesting that the Secretary use emergency authority under Federal Power Act Section 202(c) to find that an emergency condition exists in the PJM Interconnection L.L.C. (“PJM”) territory requiring immediate attention. In its Request, FES asks that the Secretary order “certain existing nuclear and coal-fired generators” to contract with PJM for energy, capacity and ancillary services to “maintain the stability of the electric grid.” FES also requests that the Secretary order PJM to “promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide.” The Request has been served on over 100 affected parties.

II. MOTION TO INTERVENE

NJ Rate Counsel is the administrative agency charged under New Jersey Law with the general protection of the interests of utility ratepayers. *N.J.S.A. 52:27E-50 et seq.* As the regulatory agency charged with protecting the utility ratepayers in the State of New Jersey, NJ Rate Counsel's participation is unique and in the public interest. Pursuant to C.F.R. §385.214(b)(2), NJ Rate Counsel is an "entity" within the meaning of Rule 214(b)(2) and NJRC accordingly moves for intervention.

If the FES Request is granted, cost responsibility for payments made pursuant to the Emergency Order may be recovered from consumers throughout the PJM region, including New Jersey. NJRC strongly opposes the Request and reserves the right to supplement this pleading to explain why it is unjust and unlawful.

NJ Rate Counsel will not be adequately represented by any other party to this proceeding, but may join with similarly situated entities. Good cause exists to grant this Motion to Intervene in this proceeding as NJ Rate Counsel represents NJ ratepayers directly affected by the FES request and is therefore a stakeholder in the outcome of the proceeding.

III. SERVICE OF DOCUMENTS

The following persons are designated by NJRC to receive service and communications on its behalf with regard to this proceeding:

Stefanie A. Brand, Esq.
Director, New Jersey Division of Rate Counsel
140 East Front Street
Trenton, NJ 08625
Phone: (609) 984-1460
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Email: sbrand@rpa.nj.gov

Brian Lipman, Litigation Manager
Henry M. Ogden, Esq.
Felicia Thomas-Friel, Esq.
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Phone: (609) 984-1460
Fax: (609) 292-2923
Email: blipman@rpa.nj.gov
hogden@rpa.nj.gov
ftomas@rpa.nj.gov

IV. STATEMENT OF OPPOSITION

Rule 214(b)(1) requires the movant to state its preliminary position. NJRC opposes the relief sought by FES. The available evidence, not cited in the Request, demonstrates that no need exists for the requested relief and certainly no emergency exists that would justify application of Section 202(c) of the Federal Power Act.

NJRC respectfully urges the Department to give all interested parties sufficient time to present their responses to the FES Request before ruling on the Request. Accordingly, NJRC supports the March 30, 2018 filing by the Electric Power Supply Association and other organizations requesting a 60-day comment period.

V. CONCLUSION

For all the foregoing reasons, NJRC respectfully requests that the Department grant NJRC's motion to intervene in this proceeding, and, if the Department does not reject the FES Request outright, provide all interested parties 60 days to file comments on the Request.

Respectfully submitted,

NEW JERSEY DIVISION OF RATE COUNSEL

/s/ Stefanie A. Brand
Stefanie A. Brand, Esq.
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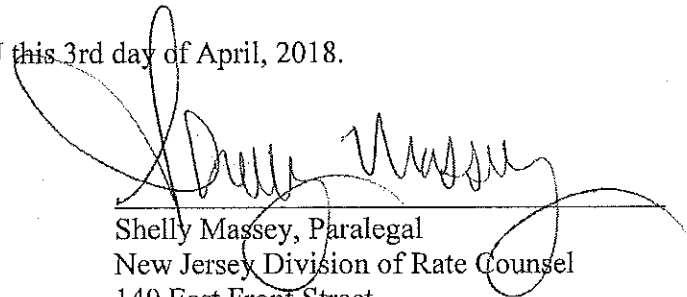
Brian Lipman, Litigation Manager
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Counsel to the New Jersey Division of Rate Counsel
Dated: April 3, 2018

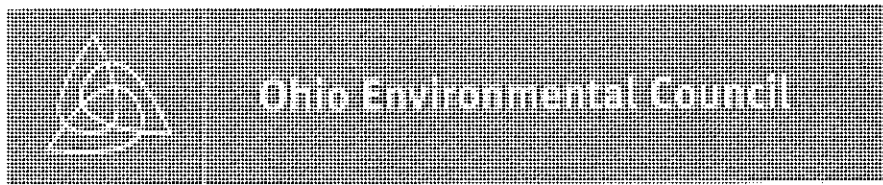
CERTIFICATE OF SERVICE

I hereby certify that I have this day served, via overnight mail or electronic transmission the foregoing upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Trenton, NJ this 3rd day of April, 2018.



Shelly Massey, Paralegal
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SUBMITTED ELECTRONICALLY VIA E-MAIL

April 3, 2018

Hon. Rick Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington D.C. 20585
The.Secretary@hq.doe.gov

Bruce Walker
Assistant Secretary, Office of Elec. Delivery & Energy Reliability
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Catherine Jereza
Deputy Assistant Secretary, Office of Elec. Delivery & Energy Reliability
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Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

On behalf of the Ohio Environmental Council (“OEC”) and its thousands of individual members throughout the state of Ohio, I write today to object to FirstEnergy Solutions Corp.’s request for an emergency order under Section 202(c) of the Federal Power Act. On March 29, 2018, FirstEnergy Solutions Corp. (“FES”) formally requested from the Department of Energy (“Department”) an emergency order asking that all merchant coal and nuclear generating units in the PJM Interconnection (“PJM”) footprint with at least 25 days of onsite fuel be provided nonmarket, cost-of-service rates and guaranteed profits for at least four years.¹ This request is just one in a number of attempts by FES, its parent First Energy Corp., and affiliate distribution companies (collectively “FirstEnergy”) to request drastic increases in consumer-funded subsidies for its otherwise unprofitable and unsustainable fossil fuel generation resources—and should be denied by the Department.

¹ Letter from FirstEnergy Solutions Corporation to the Honorable James Richard Perry (Mar. 29, 2018) (hereinafter “application”).

Interest and Standing

Throughout its 49-year history, OEC has been the state of Ohio's leading advocate for fresh air, clean water, and sustainable energy use in the state, and its members will be injured if this request is granted. Many of the OEC's members live and work in the shadows of, and experience the pollution from, the coal-fired and nuclear power plants FES is hoping to subsidize under this proposal. Even more of OEC's members will be forced to pay for this proposal's bailout of the FES fossil fuel fleet. If this order is approved, the OEC and its members throughout Ohio would be injured not only from the continuing environmental and human health degradation from these plants, but also the escalated costs reflected on their energy bills.

The OEC concurs with the arguments made by our national colleagues at Environmental Defense Fund ("EDF"), Natural Resources Defense Council ("NRDC"), Environmental Law and Policy Center ("ELPC") and Sierra Club, and others that the FES application would impose enormous cost upon American homeowners and businesses without benefit; and undermine the competitive marketplace.² To both support and supplement those comments in opposition, the OEC provides the following perspective and urges the Department of Energy to deny the FirstEnergy application requesting an emergency designation for its uneconomic power plants.

FirstEnergy's 202(c) application is the latest in a series of requests for a bailout.

The OEC has seen proposals such as this from FirstEnergy before, and disagrees with its suggestion that this request is an emergency of any sort. The Department is just the next venue in which First Energy Corp. family of companies are hoping secure additional revenue sources for its less-than-profitable generation resources. The OEC first opposed a version of FES's bailout proposal in 2014 when FirstEnergy proposed a power purchase agreement ("PPA") before the Public Utilities Commission of Ohio ("PUCO"). Under the proposed PPA, FES would transfer to the FirstEnergy Distribution Companies the right to sell all output, including energy, capacity, ancillaries, and environmental attributes from the FES share of the Ohio Valley Electric Corporation ("OVEC") which includes two sixty-year old, coal-fired power plants (Kyger Creek in Cheshire, Ohio and Clifty Creek in Madison, Indiana), the fifty-two year old Sammis coal-fired plant, and the Davis-Bessie nuclear plant. The PPA would have been secured or guaranteed by payments made by FirstEnergy customers under a new fee which they called the "Retail Rate Stabilization Rider" or Rider RRS.³

While the PUCO approved this PPA on March 31, 2016, this original approval was short lived, for on April 31, 2016, the Federal Energy Regulatory Commission ("FERC") issued an Order granting a complaint against FirstEnergy filed by a number of energy organizations and companies.⁴ Specifically, FERC granted the Complainant's request "that the Commission rescind the waiver of its affiliate power sales restrictions that it previously granted to FirstEnergy Corporation's market-regulated power sales

² See Joint Comments of EDF and NRDC submitted on March 30, 2018; See also Comments of the Sierra Club Submitted March 30, 2018

³ In *The Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of and Electric Security Plan*, PUCO Case No 14-1297-EL-SSO.

⁴ *Order Granting Complaint*, 155 FERC ¶ 61,101, (April 27, 2016).

affiliates.”⁵ Shortly after FERC’s order, FirstEnergy came back to the PUCO, this time asking not for a PPA, but credit support to ensure the Companies are not downgraded from investment grade, and to circumvent the FERC’s decision.

PUCO approved FirstEnergy’s credit support rider which therein forced customers in FirstEnergy’s territory to collectively pay up to \$204 million more per year on their electric bills, for up to five years. Over \$132 million of this is direct payment through a rider on customers’ bills to bolster the Company’s credit rating, and the rest would go to cover the Company’s taxes. Fundamentally, the impetus for this case is the fact that FirstEnergy made a series of disfavorable business decisions, refused to innovate, and doubled down on aging fossil fuel resources at a time when other utilities were transitioning to cleaner, more efficient resources. Presently, the OEC and its partners have appealed the PUCO decision to approve the FirstEnergy credit support mechanism to the Supreme Court of Ohio.⁶

Contemporaneously with the PUCO proceedings, FirstEnergy approached the General Assembly to create a Zero Emission Nuclear (ZEN) program for the state of Ohio, patterned after similar programs in Illinois and New York. The ZEN mechanism, if approved, would allow FirstEnergy to collect approximately \$300 million each year for approximately 16 years, meaning a ratepayer impact of approximately \$4.8 billion over the term of the program anticipated that this program would result in a 5% increase for the average family, and a 5-9% percent increase for business customers. However, the legislation has garnered little to no political appetite to saddle customers with a \$4 billion nuclear rate hike, and has stalled in the Ohio legislature.

FES’s attempt to use Section 202(c) is unlawful

With FirstEnergy running into stumbling blocks with state decision makers, it has turned its eyes to the US Department of Energy and FERC in the present application, seeking compensation for “operating expenses, costs of capital and debt, and a fair return on equity and investment” on these uneconomic plants. To obtain this relief, FES is requesting an emergency order. Yet, FES’s application is asking the Department of Energy to disregard federal statute and case law to give it millions of dollars to bail out its failing fossil fuel fleet.

Section 202(c) limits relief to “emergencies” that exist during continuances of war or times of “sudden” increases in the demand of electricity.⁷ Further, the emergencies envisioned by Section 202(c) are expressly meant to address “temporary” conditions with short-term results.

FES’s “emergency” surrounds nuclear facility closures scheduled to retire 2-3 years from now and coal facilities that *may* retire based on announcements. Thus on its face, the request is not at all temporary or short-term, but looks to implement long-term policy on issues that *may* emerge years in the future. FES raises the issue of preserving “resiliency” during the “Bomb Cyclone” and other winter weather with its

⁵ *Id.* at 2.

⁶ *In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating, and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the form of an Electric Security Plan*, Ohio Supreme Court Case No. 2017-1664, available at <https://www.supremecourt.ohio.gov/clerk/ecms/#/caseinfo/2017/1664>.

⁷ 16 U.S.C. 824a (c)(1).

evocation of the NETL Report in its application. However, PJM seemingly rebuffs the idea that its system's performance during extreme winter weather events poses a looming resiliency crisis.⁸ In fact, PJM, in a statement and letter to U.S. DOE Secretary Perry, stated that there "is no immediate emergency" and attributed the situation that FES finds itself in, not as based on a reliability or resilience crisis, but "fundamentally a corporate issue." Furthermore, the PUCO contradicted FirstEnergy's stance that this is an emergency crisis and FES's recent bankruptcy filing by issuing a statement that "[t]here is no reason for customers of [FirstEnergy Solutions] - or anyone else in Ohio - to be concerned about whether or not they will have electricity. They will."⁹

Case law interpreting Section 202(c) supports denial of FirstEnergy's request. *Richmond Power & Light v. FERC*, a case began in response to the 1973 oil embargo, where the FERC chose not to invoke its emergency authority despite concerns of "dire oil shortfalls."¹⁰ While the Court's decision in *Richmond Power & Light v. FERC* was more than 40 years ago, its reasoning is apt for addressing FES's current request. There, the court ruled that Section 202(c) "speaks of 'temporary' emergencies, epitomized by wartime disturbances, and is aimed at situations in which demand for electricity exceeds supply and not at those in which supply is adequate but a means of fueling its production is in disfavor."¹¹ Here, a decreased desire for fossil fuels and a decreased demand now make inefficient and old coal and nuclear generation uneconomic in PJM's competitive markets and PJM and FERC repeatedly have confirmed that there is not a reliability crisis.

As the OEC expressed in the aforementioned PUCO proceedings, FirstEnergy had access to a state law mechanism and opportunity to request emergency rate structure.¹² FirstEnergy chose not to seek that opportunity, presumably since facts could not support that FirstEnergy's situation was a true emergency. Furthermore, FirstEnergy's profit guarantee request substantially mirrors the Grid Resiliency Pricing proposal that FERC unanimously rejected less than three months ago, finding there was no urgent threat to the grid's reliability.¹³ Similar to that proposal, FirstEnergy's current rendition of its bailout request asks that coal and nuclear plants in PJM be provided a non-market cost-of-service plus profit rate. Instead of seizing the opportunity to request a rehearing of FERC's rejection of the Grid Resiliency Pricing, where the evidence was not on their side, FES chose the current emergency filing. The Department should be skeptical that the FES application meets a reasonable definition of emergency.

Conclusion

FES seeks to impose enormous cost upon consumers, and seeks to undermine the competitive markets. Any "emergency" that FES has is merely a hardship to its bottom line, and not to the reliability of the

⁸ PJM Interconnection, PJM Cold Snap Performance Dec. 28, 2017 to Jan. 7, 2018 (Feb. 26, 2018), available at <http://www.pjm.com/-/media/library/reports-notices/weatherrelated/20180226-january-2018-cold-weather-event-report.ashx>.

⁹ Statement of PUCO Chairman Haque on FES bankruptcy (April 1, 2018), available at <https://www.puco.ohio.gov/media-room/media-releases/puco-chairman-haque-statement-on-fes-bankruptcy/>.

¹⁰ *Richmond Power & Light v. FERC*, 574 F.2d 610 (D.C. Cir. 1977).

¹¹ *Id.* at 613.

¹² Ohio Rev. Code 4928.142(D)(4) states, in part: "the commission may adjust the electric distribution utility's most recent standard service offer price by such just and reasonable amount that the commission determines necessary to address any emergency that threatens the utility's financial integrity..."

¹³ Reliability and Resilience Pricing, Order Terminating Rulemaking Proceeding, Initiating New Proceeding, and Establishing Additional Procedures, 162 FERC ¶ 61,012 (Jan. 8, 2018).

regional electric grid. Thus, any resolution of the Company's financial situation should be left to FES's own devices, and not the pocketbooks of everyday Ohioans. For the reasons outlined above, the OEC asks the Department of Energy to deny the FirstEnergy profit guarantee request.

/s/ Trent A. Dougherty

Trent Dougherty

General Counsel

Ohio Environmental Council

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Columbus, OH 43212

TDougherty@theOEC.org

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

Request for Emergency Order Pursuant)
To Federal Power Act Section 202(c) By)
FirstEnergy Solutions Corp.) **DOE Docket No. _____**

**MOTION OF DISTRICT OF COLUMBIA
OFFICE OF THE PEOPLE'S COUNSEL'S
MOTION TO INTERVENE**

District of Columbia Office of the People's Counsel ("DC-OPC" or "Office"), by and through its counsel, hereby moves to intervene in the above-captioned proceeding and protests the March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act Section 202(c) by FirstEnergy Solutions Corp. ("FES"), pursuant to Rules 211 and 214 of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214.

I. PROCEDURAL BACKGROUND

On March 29, 2018, FES issued a letter ("Request") to the Energy Secretary James Richard Perry requesting that the Secretary invoke emergency authority under Federal Power Act Section 202(c) to find that an emergency condition exists in the PJM Interconnection ("PJM") territory that requires immediate intervention. In its request, FES seeks for the Secretary to order "certain existing nuclear and coal-fired generators" to contract with PJM for energy, capacity, and ancillary services to "maintain the stability of the electric grid." Further, FES requests that the Secretary order PJM to "promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide." FES has served the Request on numerous affected parties.

II. MOTION TO INTERVENE

DC-OPC is an independent agency of the District of Columbia government and serves as the statutory representative of District of Columbia ratepayers and consumers with respect to utility matters. By law, DC-OPC is the advocate for consumers of natural gas, electric and telephone services in the District and serves as a party to all utility-related proceedings before the District of Columbia Public Service Commission. Additionally, the Office represents the interests of District ratepayers before federal regulatory agencies, such as DOE, EPA, FERC and the FCC. The Office is also authorized to investigate the operation and valuation of utility companies independent of any pending proceeding.

The Office's mandate is to advocate the provision of quality utility service and equitable treatment of rates that are just, reasonable, and nondiscriminatory as well as to assist individual consumers in disputes with utility companies about billing or services; and to provide technical assistance and consumer education to lay advocates and community groups. In addition, in defining its positions while advocating on matters pertaining to the operation of public utility or energy companies, the Office considers the public safety, the economy of the District of Columbia, the conservation of natural resources, and the preservation of environmental quality.

If the Request of FES is granted, payments made pursuant to the Emergency Order may be recovered from consumers throughout the PJM region, which includes the District of Columbia ratepayers. DC-OPC opposes the Request and reserves the right to supplement this preliminary pleading to explain, in detail, why the Request would result in unjust treatment and therefore should be rejected.

DC-OPC moves to intervene under Rule 214 of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure. As Rule 214(b)(2) requires, DC-

OPC has a significant and direct interest in this proceeding's outcome. Further, DC-OPC's role as an advocate for D.C. ratepayers makes DC-OPC's participation in the public interest.

III. SERVICE OF DOCUMENTS

DC-OPC designates the following persons to receive service and communications on its behalf with regard to this proceeding:

Sandra Mattavous-Frye, Esq.
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Frederick Heinle, Esq.
Adrienne Mouton-Henderson, Esq.
Assistant People Counsels
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(202) 727-3071
fheinle@opc-dc.gov
ahenderson@opc-dc.gov

IV. STATEMENT OF OPPOSITION

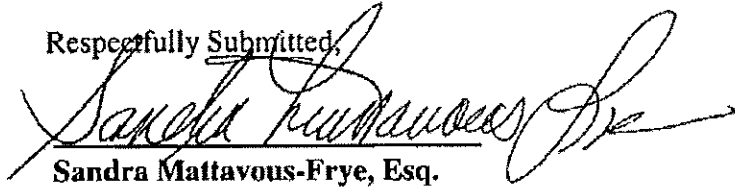
Rule 214(b)(1) requires the movant to state its preliminary position. DC-OPC opposes granting the relief FES seeks. The available evidence, not cited in this Request, demonstrates that no emergency condition exists and the requested relief is unnecessary.

DC-OPC respectfully urges the Department to give all interested parties sufficient time to present their responses to the Request before the Department rules on the Request. Accordingly, DC-OPC supports the Electric Power Supply Associations' request filed Friday, March 30, 2018 seeking a 60-day comment period.

V. CONCLUSION

For the foregoing reasons, DC-OPC respectfully requests that the Department grant DC-OPC's motion to intervene in this proceeding and, if the Department does not reject the FES Request outright, provide all interested parties 60 days to file comments on the Request.

Respectfully Submitted,



Sandra Mattavous-Frye, Esq.

People's Counsel

Office of the People's Counsel

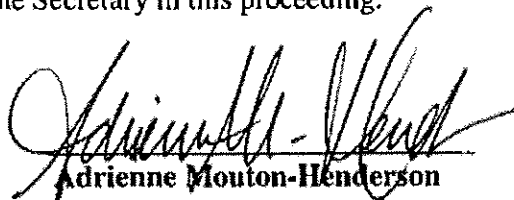
1133 15th Street NW, Suite 500

Washington, DC 20005

Dated: April 4, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have this 4th day of April 2018, served via first-class mail, electronic transmission, or hand delivery the foregoing upon each person designated on the official service list compiled by the Secretary in this proceeding.



Adrienne Mouton-Henderson

Assistant People's Counsel

Office of the People's Counsel

1133 15th Street NW, Suite 500

Washington, DC 20005

(202) 727-3071

ahenderson@opc-dc.gov

Standley, Erica

From: William Fields -OPC- <william.fields@maryland.gov>
Sent: Wednesday, April 04, 2018 3:32 PM
To: Secretary Perry; Walker, Bruce; Jereza, Catherine
Subject: First Energy Solutions Corp. Request for Emergency Action
Attachments: 04042018 - Motion to Intervene at DOE Re FirstEnergy - FINAL.pdf

Please find attached the Motion to Intervene of the Maryland Office of People's Counsel regarding the request of FirstEnergy Solutions Corp. for emergency action.

Thank you for your kind attention to this matter.

Bill Fields
Maryland Office of People's Counsel
410-767-8153

PAULA M. CARMODY
PEOPLE'S COUNSEL

THERESA V. CZARSKI
DEPUTY PEOPLE'S COUNSEL

STATE OF MARYLAND



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JACOB M. OUSLANDER
MIKHAIL RAYKHER
ANNA K. RYON

April 4, 2018

VIA U.S. MAIL AND ELECTRONIC MAIL

The Honorable Rick Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
The.secretary@hq.doe.gov

Mr. Bruce Walker
Assistant Secretary, DOE Office of Elec. Deliver & Energy Reliability
Office of Electric Reliability and Energy Reliability
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Ms. Catherine Jereza
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Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
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Re: Motion to Intervene of the Maryland Office of People's Counsel

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

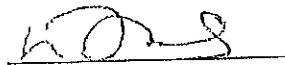
Attached is the Motion to Intervene of the Maryland Office of People's Counsel (MPC) in the matter concerning FirstEnergy Solutions Corp.'s (FirstEnergy Solutions)

Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza
April 4, 2018
Page 2

Request for Emergency Action under Section 202(c) of the Federal Power Act. MPC is an independent state agency established to represent the interests of residential customers in utility matters. Maryland Public Utilities Code Annotated, Section 2-205(b)(2016). All of Maryland is in the PJM Interconnection, L.L.C. region and the relief requested by FirstEnergy Solutions would affect the cost of electricity for Maryland electricity customers. MPC opposes FirstEnergy's emergency request. If this request is not denied outright, the department should establish an extended period for public comment before taking action.

Respectfully Submitted,

Paula M. Carmody
People's Counsel



William F. Fields
Senior Assistant People's Counsel

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

**Request for Emergency Order Pursuant)
To Federal Power Act Section 202(c) By)
FirstEnergy Solutions Corp.) DOE Docket No. _____**

MOTION TO INTERVENE OF THE MARYLAND OFFICE OF PEOPLE'S COUNSEL

Pursuant to Rules 212 and 214 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (the "Commission"), 18 C.F.R. §§385.212 and 385.214, the Maryland Office of People's Counsel ("MPC") hereby seeks Leave to Intervene in the above-captioned proceeding. In support of this Motion, MPC states the following:

1. MPC is an independent state agency that was established to represent the interests of residential consumers in utility cases. Pursuant to Maryland Public Utility Companies Code Annotated, Section 2-205(b)(2016), the People's Counsel "may appear before any federal or state agency as necessary to protect the interests of residential...users of [gas, electricity or other regulated services]."

2. The name, address, telephone, facsimile and e-mail address of the Maryland Office of People's Counsel's designated representative for receipt of service in this proceeding is:

William F. Fields
Senior Assistant People's Counsel
Maryland Office of People's Counsel
6 St. Paul Street, Suite 2102
Baltimore, Maryland 21202
(410) 767-8150
(410) 333-3616 (facsimile)
William.fields@maryland.gov (e-mail)

3. On March 29, 2018, FirstEnergy Solutions, Corp. ("FES") filed a letter requesting emergency action by the Secretary of Energy pursuant to Section 202(c) of the Federal Power Act.

FES requests that the Secretary issue an order that would require PJM Interconnection, L.L.C. ("PJM") to contract with generating plant owned by FES, as well as coal and nuclear plants owned by other entities, to purchase the output of the plants.

4. In January, 1999, the Maryland General Assembly passed the Electric Customer Choice and Competition Act of 1999. Maryland Public Utility Companies Code Annotated, Section 7-501, *et. seq.* (2007). This act institutes competition for retail electric service beginning July 1, 2000. All retail customers in Maryland purchase electricity from suppliers that operate in the PJM market.

5. If the FES request is granted, there would be a significant cost impact on consumers throughout PJM, including customers in Maryland.

6. The specific interests of Maryland residential consumers are not adequately represented by other parties to this matter, and that MPC's intervention is necessary in order to protect these interests.

7. MPC is opposed to the FES request. FPA §202(c) requires a finding of an emergency in order to act. All available evidence indicates that there is no emergency at this time and no justification for granting the relief requested by FES. PJM has announced that it has begun its evaluation of the reliability impacts of the plant closings announced by FES. There are means under the existing PJM tariff to address any reliability issues that are found to exist if the plants retire. The PJM tariff allows for a 90-day window for the PJM analysis process. The announced FES plant retirements are far more than 90 days in the future. There will be more than adequate time to address any reliability concerns that arise from the potential closing of the FES plants. With respect to generating plants owned by other entities, there is no basis for finding that any action with respect to those plants is necessary or appropriate.

8. MPC respectfully requests that the Secretary deny the FES request. If the request

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 4th day of April, 2018, a copy of the forgoing Motion For Leave To Intervene Of the Maryland Office Of People's Counsel was served on each person designated below:

Rick C. Giannantonio
General Counsel
FirstEnergy Solutions Corp.
76 South Main Street
Akron, OH 44308
TEL: (330) 384-5893
giannanr@firstenergycorp.com

William S. Sherman
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William F. Fields
Senior Assistant People's Counsel

Maryland Office of People's Counsel
6 St. Paul Street, Suite 2102
Baltimore, Maryland 21202
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From: [OE Webmaster](#)
To: [Bittner, Kathy \(CONTR\)](#)
Subject: FW: Petition to Intervene In FirstEnergy Solutions FPA Section 202(c) Request
Date: Friday, April 06, 2018 7:42:53 AM
Attachments: [DOE First Energy Solutions Case Petition to Intervene DC PSC \(04-05-2018\).pdf](#)

Hi Kathy:

This came in through the OE Webmaster.

Thanks,
Debra

From: Berry, Craig (PSC) [mailto:cberry@psc.dc.gov]
Sent: Thursday, April 05, 2018 4:59 PM
To: Secretary Perry <The.Secretary@hq.doe.gov>; OE Webmaster <OEWebmaster@hq.doe.gov>
Cc: Fygi, Eric <Eric.Fygi@hq.doe.gov>
Subject: Petition to Intervene in FirstEnergy Solutions FPA Section 202(c) Request

Dear Secretary Perry and Assistant Secretary Walker:

Attached is the Petition to Intervene of the Public Service Commission of the District of Columbia in the DOE case concerning the Request for Emergency Order Pursuant to Federal Power Act Section 202(c) of FirstEnergy Solutions Corporation.

If there are any issues with the attached filing please contact me.

Craig Berry

Craig W. Berry
Attorney Advisor
Office of the General Counsel
Public Service Commission of the District of Columbia
1325 G Street, N.W., Suite 800
Washington, DC 20005
202-626-9181
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**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

**Request for Emergency Order Pursuant)
To Federal Power Act Section 202(c) By)
FirstEnergy Solutions Corp.)**

DOE Docket No. _____

**MOTION TO INTERVENE
OF THE PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA**

The Public Service Commission of the District of Columbia (“D.C. PSC”) hereby moves to intervene in the above-captioned proceeding and protest the March 29, 2018, Request for Emergency Order Pursuant to Federal Power Act (“FPA”) Section 202(c) by FirstEnergy Solutions Corp. (“FES”), pursuant to Rules 211 and 214 of the Federal Energy Regulatory Commission’s (“Commission”) Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214.

I. PROCEDURAL BACKGROUND

On March 29, 2018, FES submitted a letter (“FES Request”) to the Honorable James Richard Perry, Secretary (“Secretary”) of the Department of Energy (“Department”), requesting that the Secretary use emergency authority under Section 202(c) of the FPA to find that an emergency condition exists in the PJM Interconnection, L.L.C. (“PJM”) territory requiring immediate intervention. FES requests that the Secretary: (a) order “certain existing nuclear and coal-fired generators . . . to enter into contracts” with PJM to generate and transmit energy, capacity, and ancillary services to “maintain the stability of the electric grid;” and (b) order PJM to “promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide” to energy markets and the public.

II. MOTION TO INTERVENE

The D.C. PSC is an independent agency of the District of Columbia created by the District of Columbia Home Rule Charter to ensure that public utilities doing business in the District provides reasonable, safe, and adequate service and facilities and that their rates are just and reasonable. The D.C. PSC has plenary supervision over all electric companies in the District of Columbia (D.C. Code §§ 1-204.93 and 34-301 (2001 Ed.)). Accordingly, the D.C. PSC is a “state commission” within the meaning of Rule 214(a)(2) of the Commission’s Rules of Practice and Procedure and is entitled to intervene in this proceeding as of right.

The District of Columbia is within the footprint of PJM, and if FES’s requested relief is granted, responsibility for payments made pursuant to the Emergency Order will be recovered from consumers throughout the PJM region, including District of Columbia residents. The D.C. PSC strongly objects to the FES Request and reserves the right to supplement this preliminary pleading to explain, in detail, why the FES Request is unsupported, unlawful, and should be rejected.

The D.C. PSC moves for intervention under Rule 214 of the Commission’s Rules of Practice and Procedure.¹ In conformity with Rule 214(b)(2), the D.C. PSC has a significant and direct interest in the outcome of this proceeding as every electricity customer in the District of

¹ The Commission’s Rules of Practice and Procedure should be used for procedural guidance in Emergency Order proceedings. *See* DOE Answer to Procedural Questions Concerning Rehearing of DOE Order, *District of Columbia Public Service Commission*, Docket No. EO-05-01 (December 30, 2005) at 2.

Columbia will be immediately and severely affected. The D.C. PSC's participation in this proceeding is in the public interest.

III. SERVICE OF DOCUMENTS

The following persons are designated by the D.C. PSC to receive service and communications on its behalf with regard to this proceeding:

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IV. STATEMENT OF OPPOSITION

Rule 214(b)(1) requires the movant to state its preliminary position. The D.C. PSC opposes the departure from competitive markets sought by FES. The FES Request failed to make the requisite showing of an “emergency” under the definition of Section 202(c) of the FPA and instead misinterpreted available data to support its “general dissatisfaction with the PJM markets or its competitive position therein.”² The Secretary has only granted a request of this nature in five (5)

² PJM letter to The Honorable James Richard Perry, filed in this proceeding on March 30, 2018, at n. 1.

instances; in each, a clear emergency had been demonstrated. For example, in 2005, the Secretary granted the D.C. PSC's petition for emergency relief under Section 202(c) when one of the three close proximity generating facilities serving the District of Columbia was threatened with closure due to environmental compliance issues, because: (1) there was a "reasonable possibility an outage w[ould] occur that would cause a blackout;" (2) "the number and importance of facilities and operations in our Nation's Capital that would be potentially affected by such a blackout, the extended number of hours of any blackout that might in fact occur;" and (3) "the current situation violates applicable reliability standards."³ Our petition, which clearly demonstrated an immediate and sustained threat to grid reliability, stands in sharp contrast to the FES Request, which is overbroad and fails to substantiate the requested relief.

In a similar proceeding, responding to nearly identical arguments,⁴ the Commission utilizing its relevant industry expertise, determined that, "[w]hile some commenters allege grid resilience or reliability issues [exist] due to potential retirements of particular resources, we find that these assertions do not demonstrate the unjustness or unreasonableness of the existing RTO/ISO tariffs. In addition, the extensive comments submitted by the RTOs/ISOs do not point to any past or planned generator retirements that may be a threat to grid resilience."⁵ The Commission also established additional proceedings to ensure that all facets of grid reliability and resilience were thoroughly vetted in an orderly and transparent fashion.

³ See Order No. 202-05-3, *District of Columbia Public Service Commission*, Docket No. EO-05-01 (December 20, 2005) at 6.

⁴ See Comments of FES et al. in support of the Grid Reliability and Resilience Pricing Notice of Proposed Rulemaking, Commission, Docket No. RM18-1 (October 23, 2017).

⁵ 162 FERC ¶ 61,012 (2018) at P 15. (internal citations omitted).

Based on the foregoing, the FES Request should be denied. However, the D.C. PSC respectfully urges the Department to give all interested parties sufficient time to fully present their responses to the FES Request before issuing a determination. Accordingly, the D.C. PSC supports the Electric Power Supply Association's request seeking a 60-day comment period that was filed in this proceeding on March 30, 2018.

V. CONCLUSION

For the reasons set forth above, the D.C. PSC respectfully requests that the Department grant its motion to intervene in this proceeding. Further, the D.C. PSC asks that the Department reject the FES Request on the record as it stands, or, in the alternative, provide all interested parties with 60 days to file comments.

Respectfully submitted,

/s/ Craig W. Berry
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Attorney Advisor
D.C. Public Service Commission
1325 G Street, N.W., Suite 800
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Phone: (202) 626-9181
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CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each party designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 5th day of April 2018.

/s/ Craig W. Berry
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From: Jereza, Catherine
To: Bittner, Kathy (CONTR)
Subject: FW: First Energy Solutions Corp.'s Request for Emergency Order - NJBPU Motion to Intervene
Date: Thursday, April 05, 2018 5:37:25 PM
Attachments: 2018-04-05 - NJBPU Motion to Intervene.pdf

From: Timothy Oberleiton [mailto:Timothy.Oberleiton@law.njoag.gov]
Sent: Thursday, April 05, 2018 5:01 PM
To: Secretary Perry <The.Secretary@hq.doe.gov>; Walker, Bruce <Bruce.Walker@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>
Cc: Carolyn McIntosh <Carolyn.McIntosh@law.njoag.gov>; Alex Moreau <Alex.Moreau@law.njoag.gov>; Cynthia.Holland@bpu.nj.gov
Subject: First Energy Solutions Corp.'s Request for Emergency Order - NJBPU Motion to Intervene

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza,

Please find attached for service upon the Department of Energy a copy of the New Jersey Board of Public Utilities' Motion to Intervene regarding the March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act Section 202(c) filed by FirstEnergy Solutions Corp., a hard copy of which has been sent via UPS Overnight Mail.

Respectfully submitted,

Timothy R. Oberleiton
Deputy Attorney General
New Jersey Office of the Attorney General
Division of Law – Public Utilities Section
124 Halsey Street, 2nd Floor
Newark, NJ 07101
Tel: (973) 648-3441
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CONFIDENTIALITY NOTICE The information contained in this communication from the Office of the New Jersey Attorney General is privileged and confidential and is intended for the sole use of the persons or entities who are the addressees. If you are not an intended recipient of this e-mail, the dissemination, distribution, copying or use of the information it contains is strictly prohibited. If you have received this communication in error, please immediately contact the Office of the Attorney General at (609) 292-4925 to arrange for the return of this information.



PHILIP D. MURPHY
Governor

State of New Jersey
OFFICE OF THE ATTORNEY GENERAL
DEPARTMENT OF LAW AND PUBLIC SAFETY
DIVISION OF LAW
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SHEILA Y. OLIVER
Lt. Governor

MICHELLE L. MILLER
Director

Timothy R. Oberleiton
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timothy.oberleiton@law.njoag.gov

April 5, 2018

VIA OVERNIGHT AND ELECTRONIC MAIL

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
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Washington, DC 20585
the.secretary@hq.doe.gov

Mr. Bruce Walker
Assistant Secretary, DOE Office of Elec. Delivery & Energy Reliability
Office of Electric Reliability and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
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bruce.walker@hq.doe.gov

Ms. Catherine Jereza
Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
catherine.jereza@hq.doe.gov

RE: Motion of the New Jersey Board of Public Utilities to Intervene

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Please accept this letter and attached Motion of the New Jersey Board of Public Utilities ("NJBP") to intervene in this proceeding concerning FirstEnergy Solutions Corp.'s ("FES") Request for Emergency Action under Section 202(c) of the Federal Power Act. If the Request is



granted, payments made pursuant to the Emergency Order may be recovered from customers (ratepayers) throughout the PJM Interconnection, L.L.C. region, including ratepayers in New Jersey.

The NJBPU is the administrative agency charged under New Jersey law with the general supervision, regulation, jurisdiction, and control over all public utilities in the State of New Jersey ("State"), including electric and gas utilities and their rates and service. N.J.S.A. 48:2-13; N.J.S.A. 48:2-21. The NJBPU is a state regulatory commission, as recognized by the Federal Power Act, 16 U.S. Code § 824, and Rule 214(a)(2) of the Federal Energy Regulatory Commission's ("FERC") Rules of Practice and Procedure, which governs intervention before FERC.

The NJBPU seeks to intervene in this proceeding in the interest of New Jersey ratepayers. Further, NJBPU opposes this FES request for emergency action and asks that the Department immediately reject the FES Request, or, in the alternative, provide all interested parties with 60 days to file comments.

Respectfully submitted,

GURBIR S. GREWAL
ATTORNEY GENERAL OF NEW JERSEY

By: Timothy R. Oberleiton
Timothy R. Oberleiton
Deputy Attorney General

cc: Service List (w/encl., by electronic mail)

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

**Request for Emergency Order Pursuant)
To Federal Power Act Section 202(c) By)
FirstEnergy Solutions Corp.)**

DOE Docket No. _____

**MOTION TO INTERVENE OF THE
NEW JERSEY BOARD OF PUBLIC UTILITIES**

The New Jersey Board of Public Utilities (“NJBPU”) hereby moves to intervene in the above-captioned proceeding and protests the March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act Section 202(c) by FirstEnergy Solutions Corp. (“FES”), pursuant to Rules 211 and 214 of the Federal Energy Regulatory Commission’s (“Commission”) Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214.

I. PROCEDURAL BACKGROUND

On March 29, 2018, FES sent a letter (“FES Request”) to the Honorable James Richard Perry, Secretary of the Department of Energy (“Department”), requesting that the Secretary use emergency authority under Section 202(c) of the Federal Power Act to find that an emergency condition exists in the PJM Interconnection, L.L.C. (“PJM”) territory requiring immediate intervention. The FES Request seeks two forms of relief: that the Secretary (a) order “certain existing nuclear and coal-fired generators . . . to enter into contracts” with PJM to generate and transmit energy, capacity, and ancillary services to “maintain the stability of the electric grid” and (b) order PJM to “promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide” to energy markets and the public. The FES Request includes an undated

Certification of Service claiming that it was served on over 100 owners of generation, transmission, or distribution assets, state public utility commissions, including the NJBPU, and others.¹

II. INTERVENTION

The NJBPU is the administrative agency charged under New Jersey law with the general supervision, regulation, jurisdiction, and control over all public utilities in the State of New Jersey (“State”), including the obligation to ensure that utilities provide safe, adequate and proper service at a just and reasonable rate.² The NJBPU is a state regulatory commission, as recognized by the Federal Power Act, 16 U.S. Code § 824, and Rule 214(a)(2) of the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) Rules of Practice and Procedure, which governs intervention before FERC.

If the FES Request is granted, payments made pursuant to the Emergency Order may be recovered from customers (ratepayers) throughout the PJM region, including ratepayers in New Jersey. In conformity with Rule 214, the NJBPU has a significant and direct interest in the outcome of this proceeding as electricity customer throughout the PJM region, including New Jersey, will be affected. Given this risk to New Jersey ratepayers, NJBPU seeks to intervene in this proceeding and protests the FES Request. NJBPU further reserves the right to supplement this preliminary pleading to explain, in detail, why the FES Request should be rejected. NJBPU’s intervention in this proceeding is in furtherance of the public interest and should be granted.

¹ NJBPU has yet to receive service of the FES Request. It appears that FES sent a copy of its Request dated March 30, 2018 to NJBPU Commissioner Richard Mroz. The Request was not received until April 4, 2018, but, regardless, was not properly served on the NJBPU.

² See N.J.S.A. 48:2-13; N.J.S.A. 48:2-21; N.J.S.A. 48:2-23.

III. COMMUNICATIONS

All communications with respect to this matter should be addressed as follows:

Cynthia L. M. Holland
New Jersey Board of Public Utilities
44 South Clinton Ave.
Trenton, NJ 08609
(609) 292-1629
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Timothy R. Oberleiton
Carolyn A. McIntosh
Alex Moreau
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IV. STATEMENT OF OPPOSITION

Rule 214(b)(1) requires the movant to state its preliminary position. NJBPU opposes granting the relief sought by the FES Request. The FES Request has failed to make the requisite showing of an emergency under the definition of Section 202(c). Therefore, it should be rejected.

In a similar proceeding, responding to nearly identical arguments,³ the Commission determined that, “[w]hile some commenters allege grid resilience or reliability issues [exist] due to potential retirements of particular resources, we find that these assertions do not demonstrate the unjustness or unreasonableness of the existing RTO/ISO tariffs. In addition, the extensive comments submitted by the RTOs/ISOs do not point to any past or planned generator retirements that may be a threat to grid resilience.”⁴ The Commission also initiated a new proceeding, under Docket No. AD18-7-000, to holistically examine the resilience of the bulk power system. In doing so, the Commission recognized that “it must remain vigilant with respect to resilience challenges, because

³ See Comments of First Energy Service Co., et al. in support of the Grid Reliability and Resilience Pricing Notice of Proposed Rulemaking, Docket No. RM18-1 (Filed Oct. 23, 2017)

⁴ 162 FERC ¶ 61,012 (2018) at P 15 (internal citations omitted).

affordable and reliable electricity is vital to the country's economic and national security.”⁵ That proceeding is on-going. NJBPU asks that the Department consider this separate proceeding in its review of the FES Request.

Moreover, NJBPU respectfully urges the Department to give all interested parties sufficient time to present their responses to the FES Request before issuing a determination. Accordingly, the NJBPU supports and joins the numerous requests filed in this proceeding seeking a 60-day comment period.

V. CONCLUSION

For the reasons set forth above, NJBPU respectfully requests that the Department grant its motion to intervene in this proceeding. Further, NJBPU protests the FES request and asks that the Department immediately reject the FES Request, or, in the alternative, provide all interested parties with 60 days to file comments.

Respectfully submitted,

**NEW JERSEY BOARD OF PUBLIC
UTILITIES**

By: /s/Cynthia L. M. Holland
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**GURBIR S. GREWAL
ATTORNEY GENERAL OF NEW JERSEY**

By: /s/Timothy R. Oberleiton
Timothy R. Oberleiton
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DATED: April 5, 2018

⁵ <https://www.ferc.gov/media/news-releases/2018/2018-1/01-08-18.asp#.WsT66C7waUk>

CERTIFICATE OF SERVICE

I hereby certify that I have on this 5th day April, 2018, served via overnight mail or electronic transmission, the foregoing upon each person designated on the official service list⁶ compiled by the Secretary in this proceeding.

/s/ Timothy R. Oberleiton

Timothy R. Oberleiton

Deputy Attorney General

New Jersey Office of the Attorney General

Department of Law & Public Safety

Division of Law

124 Halsey Street, 5th Floor

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Newark, New Jersey 07101

(973) 648-3441

timothy.oberleiton@law.njoag.gov

DATED: April 5, 2018

⁶ While our office is not aware of an “official” DOE service list in this matter, we have created a list comprising the interested parties known at this time.



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April 5, 2018

Via Electronic Mail

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RE: Protest of the PJM Consumer Representatives

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

The PJM Industrial Customer Coalition ("PJMICC"), on behalf of the PJM Consumer Representatives, hereby submits the attached Protest to FirstEnergy Solutions Corp.'s ("FES") March 29, 2018 Request For Emergency Action Under Section 202(c) of the Federal Power Act.

www.McNeesLaw.com

HARRISBURG, PA • LANCASTER, PA • SCRANTON, PA • STATE COLLEGE, PA • COLUMBUS, OH • FREDERICK, MD • WASHINGTON, DC

The Honorable James Richard Perry, et al.
April 5, 2018
Page 2

Respectfully submitted,

McNEES WALLACE & NURICK LLC



By

Robert A. Weishaar, Jr.

Counsel to the PJM Industrial Customer Coalition
and on behalf of the PJM Consumer
Representatives

RAW/db

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

Request for Emergency Order Pursuant
To Federal Power Act Section 202(c) By
FirstEnergy Solutions Corp.

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)
)
)
)

DOE Docket No. _____

**PROTEST OF THE
PJM CONSUMER REPRESENTATIVES
TO THE EMERGENCY ORDER REQUEST
OF FIRSTENERGY SOLUTIONS CORP.**

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Counsel to the PJM Industrial Customer Coalition
and on behalf of the PJM Consumer
Representatives

Dated April 5, 2018

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**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

Request for Emergency Order Pursuant
To Federal Power Act Section 202(c) By
FirstEnergy Solutions Corp.

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)
)
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DOE Docket No. _____

**PROTEST OF THE
PJM CONSUMER REPRESENTATIVES
TO THE EMERGENCY ORDER REQUEST
OF FIRSTENERGY SOLUTIONS CORP.**

On March 29, 2018, FirstEnergy Solutions Corp. (“FES”) submitted a Request for Emergency Order Pursuant to Federal Power Act Section 202(c)¹ (“Request” or “Emergency Order Request”) to the Secretary of the Department of Energy (“DOE” or “Department”). Pursuant to Rule 211 of the Federal Energy Regulatory Commission’s (“Commission” or “FERC”) Rules of Practice and Procedure, 18 C.F.R. §§ 385.211, the PJM Consumer Representatives hereby protest the FES’s Request.²

¹ 16 U.S.C. § 824a(c).

² Federal Power Act Section 202(c) and the Department indicate that the Federal Power Act and the Commission’s Rules of Practice and Procedure should be used for procedural guidance in Emergency Order proceedings. Guidance published on the Department’s website points to the Commission’s Rules where DOE regulations at 10 C.F.R. § 205.370, et. seq., are silent. *See, e.g.,* DOE Answer to Procedural Questions Concerning Rehearing of DOE Order, *District of Columbia Public Service Commission*, Docket No. E0-05-01 (December 30, 2005) at 2. Additionally, the Department has taken the position that the procedure for judicial review of emergency orders under Section 202(c) of the Federal Power Act must be secured through Section 313 of that Act, 16 U.S.C. § 8251. *See, e.g.,* Order No. 202-05-3, *District of Columbia Public Service Commission*, Docket No. E0-05-01 (December 20, 2005) at 11-12. The plain language of Section 202(c)(5) of the Federal Power Act, enacted in 2016, reinforces this principle. Where, as here, a proceeding exists under Chapter 12 of the Federal Power Act, the Commission’s Rules of Practice and Procedure apply. *See* 16 U.S. Code § 825g(b) (Federal Power Act § 308) (“All hearings, investigations, and proceedings under this chapter shall be governed by rules of practice and procedure to be adopted by the Commission.”).

For purposes of this Protest, the PJM Consumer Representatives are comprised of the following:

PJM Industrial Customer Coalition

State of Delaware Division of the Consumer Advocate

Industrial Energy Consumers of America

West Virginia Consumer Advocate

New Jersey Division of Rate Counsel

West Virginia Energy Users Group

Pennsylvania Office of Consumer Advocate

Chemistry Council of New Jersey

Public Power Association of New Jersey

Delaware Public Service Commission

District of Columbia Office of People's Counsel

American Municipal Power, Inc.

Old Dominion Electric Cooperative

American Forest & Paper Association

Southern Maryland Electric Cooperative, Inc.

Maryland Office of People's Counsel

Illinois Industrial Energy Consumers

The Association of Business Advocating Tariff Equity

American Foundry Society

Indiana Office of Utility Consumer Counsel

Indiana Industrial Energy Consumers, Inc.

Ohio Chemistry Technology Council

American Chemistry Council

Industrial Energy Users – Ohio

Illinois Citizens Utility Board

Industrial Minerals Association – North America

National Industrial Sand Association

Pennsylvania Energy Consumer Alliance

I. PROTEST

FES requests the Secretary of the DOE (“the Secretary”) to use the vehicle of an emergency order to require consumers in the PJM Region to bail out certain types of generation assets that have become uneconomic. The Request is framed in alarming and urgent language, but many of the premises underlying the Request are vastly overstated or demonstrably false. FES fails to acknowledge existing procedures to safeguard essential assets and protect reliability without imposing unjust, unreasonable, and unduly discriminatory costs on consumers in the PJM Region; fails to acknowledge substantial evidence of PJM’s successful reliability measures and actions over the past few years; and fails to demonstrate that a true Section 202(c) emergency exists. The Request fails to demonstrate why nuclear and coal generation facilities should receive a bail-out, likely forcing consumers to absorb significant additional and unnecessary costs.

The Request fails as a matter of fact and law for the following reasons:

- Section 202(c) of the Federal Power Act is very limited in scope, and FES’s attempt to apply Section 202(c) beyond its intended scope is unlawful.
- FES’s Emergency Order Request is unprecedented and overbroad.
- FES has not demonstrated that an emergency exists.
- If reliability concerns were to arise, PJM has in place adequate processes for addressing those concerns.

- If granted, the Request would unnecessarily raise energy prices for consumers and directly undercut the tremendous economic advantage to the United States from natural gas shale plays.
 - FES's argument that energy price formation in PJM does not adequately compensate baseload resources is invalid and inappropriate in an emergency order request; FES's argument on price formation is more appropriately presented and examined in the ongoing PJM stakeholder process.
 - FES seeks to undermine the recent Commission order rejecting the grid resiliency pricing proposal and the ongoing FERC grid resiliency proceeding (Dockets AD18-7 and RM18-1) and other stakeholder processes.
 - FES's clearing of the Base Residual Auction ("BRA") through 2020-2021 demonstrates that FES currently has an obligation, and associated compensation for that obligation, to run its units through May 31, 2021.
- A. Section 202(c) of the Federal Power Act is Very Limited in Scope, and FES's Attempt to Apply Section 202(c) Beyond Its Intended Scope is Unlawful.**
- 1. Section 202(c) confines emergencies to specific, imminent events, and any solutions must be specific and temporary.**

Section 202(c) of the Federal Power Act confers certain emergency powers upon the Secretary.³ Importantly, Section 202(c) confines emergencies to specific, imminent events. Section 202(c) of the Federal Power Act grants the Department authority over "the generation of electric energy" in the following circumstances: (1) during wartime; or (2) if "the [Department] determines that an emergency exists by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy, or of fuel or water for generating facilities, or other causes."⁴

The text of the statute provides inherent limitations on the emergency powers and confines Emergency Orders to specific, imminent events. First, the term "exists" indicates a present tense concern—not a distant possibility several years in the future. Second, the term "emergency" is

³ See 16 U.S.C. § 824a(c).

⁴ 16 U.S.C. § 824a(c).

defined by Merriam-Webster's Dictionary as "an unforeseen combination of circumstances or the resulting state that calls for immediate action."⁵ Elsewhere, the same dictionary references an emergency as applying "to a sudden unforeseen situation requiring prompt action to avoid disaster."⁶ This indicates a situation that is imminent and unavoidable. Third, the statute's reference to "wartime powers" indicates the type of factual context Congress intended for the Emergency Order power to be used. The D.C. Circuit has affirmed this view, stating that Section 202(c) "speaks of 'temporary' emergencies, epitomized by wartime disturbances"⁷ and that the statute is reasonably understood to exclude circumstances such as "dependence on imported oil." Finally, the use of the words "sudden" and "shortage" reinforce the statutory context of an immediate need.⁸

Moreover, Emergency Orders are intended to provide for only temporary solutions. The text of Section 202(c) indicates an Emergency Order may "require . . . such *temporary connections of facilities* and such generation, delivery, interchange, or transmission of electric energy as in its judgment will best meet the emergency and serve the public interest." Gradual industry changes affecting certain types of generation resources do not constitute a sudden emergency requiring immediate action.

The development of the Federal Power Act also confirms that the authority for Emergency Orders under Section 202(c) is limited to unusual, unexpected circumstances. In 2005, Congress added Section 215 of the Federal Power Act, establishing an Electric Reliability Organization and

⁵ Definition of "emergency," Merriam-Webster's Dictionary 407 (11th ed. 2004).

⁶ Definition of "juncture," Merriam-Webster's Dictionary 678 (11th ed. 2004). The definition of "juncture" further includes this additional definition of "emergency."

⁷ See *Richmond Power and Light v. Federal Energy Reg. Comm.*, 574 F.2d 610, 615 (D.C. Cir. 1978).

⁸ See *Jarecki v. G.D. Searle & Co.*, 367 U.S. 303, 307 (1961) (statutory terms should be interpreted in context of nearby parallel terms "in order to avoid the giving of unintended breadth to the Acts of Congress").

specifying procedures, remedies, and timeframes for federal reliability standards.⁹ As aptly noted in Sierra Club’s response to FES’s Emergency Order Request, prior to the Energy Policy Act of 2005, “the reliability of the nation’s bulk-power system depended on participants’ *voluntary* compliance with industry standards.”¹⁰ Consequently, Federal Power Act provisions that predated the Energy Policy Act, including Section 202(c), were not intended to provide the federal government with authority to enforce broad, long-term reliability requirements. That authority commenced with the Energy Policy Act of 2005, and that authority rests with the Commission, not the Department. Finally, broad ratemaking authority rests with the Commission—not the Department—and is addressed in other provisions within the Federal Power Act. As discussed in further detail below, FES’s Request unlawfully exceeds the scope of the Department’s authority under Section 202(c) in each of these respects.

2. FES’s Request seeks an Emergency Order that would be illegal and that would violate Section 202(c).

FES’s Request is unlawful because it: (1) does not present substantial evidence of an imminent threat to reliability and, even if it did, (2) the requested relief far exceeds the intended breadth of relief and the Department’s authority under 202(c). In Section B of this Protest, the PJM Consumer Representatives demonstrate that the scope of FES’s requested Emergency Order is unprecedented, overbroad, and impermissibly seeks to override existing statutory and regulatory authority as well as FERC and DOE precedent. In Section C of this Protest, the PJM Consumer Representatives explain that FES failed to substantively demonstrate an emergency exists in PJM.

⁹ See generally 16 U.S.C. § 825o.

¹⁰ Sierra Club Comments at 6 (quoting *Alcoa, Inc. v. FERC*, 564 F.3d 1342, 1344 (D.C. Cir. 2009) (emphasis added) (filed with DOE on Mar. 30, 2018)).

While Section 202(c) confers certain emergency powers upon the Secretary,¹¹ FES ignores the text of Section 202(c)'s limitations on the use of emergency power as emergencies are specific, imminent events. FES has failed to even state a case that the potential retirement of certain generation assets, several years from now, meets the definition of an emergency. FES passionately advocates for Secretarial intervention without demonstrating that there is an imminent need for intervention for any specific generation unit.

The text of Section 202(c) describes the core power of an Emergency Order to order “*generation, delivery, interchange or transmission of electric energy.*”¹² FES's Request asks for nothing of the sort. The Request fails to identify any generation or other resource that the Secretary should order to be activated or connected.¹³ Instead, the Request is purely financial in nature, asking the Secretary to override existing contracts for assets that are *already* generating electricity. In other words, this Request is about a self-perceived crisis of compensation, not a generation emergency.

FES's urgent and descriptive language cannot conceal the fact that, *even if FES's factual claims were to be believed*, FES's claimed “emergency” is several years away. In the Request, FES did not show that any alternative courses of action were unavailable to address its self-perceived crisis, and it did not demonstrate why the emergency request, *at this time*, is prudent and necessary. FES cites to no current shortfall in power supply. Giving any credence whatsoever to FES's Emergency Order Request would pave the way for other entities to assert an emergency

¹¹ See 16 U.S.C. § 824a(c).

¹² 16 U.S.C. § 824a(c)(1), (2) (emphasis added).

¹³ 10 C.F.R. § 205.373(h) requires an Emergency Order Request to include “[a] description of efforts made to obtain additional power through voluntary means and the results of such efforts.” FES stated this was PJM's responsibility. Request at 29. However, FES could not provide this information because its Request does not ask the Secretary to order additional generation. The Request is simply seeking additional *compensation* for its current generation assets.

whenever their self-perceived crises are only economic and result from the inevitable changing mix of generation resources. Declaring an emergency now, as FES requests, runs directly contrary to the following provision of 10 C.F.R. § 205.371: “Situations where a shortage of electric energy is projected due solely to the failure of parties to agree to terms, conditions, or other economic factors relating to service, generally will not be considered emergencies *unless the inability to supply electric service is imminent.*”¹⁴ FES’s Request fails to state any imminent or specific threat that meets the definition of “emergency” under the statute or its associated regulations.¹⁵

The Department’s regulations define “emergency” in 10 C.F.R. § 205.371 as “an unexpected inadequate supply of electric energy which may result from the unexpected outage or breakdown of facilities for the generation, transmission or distribution of electric power.” Section 371 lists six causes of an emergency: (1) weather conditions, (2) acts of God, (3) unforeseen circumstances not preventable by the “entity,” (4) sudden increase in customer demand, (5) inability to obtain adequate amounts of the fuels necessary to generate electricity, or (6) regulatory action prohibiting certain power supply facilities. FES’s Request matches none of these causes. More importantly, FES has shown no “unexpected inadequate supply of electric energy,” as required by the Department’s regulations.¹⁶

¹⁴ Emphasis added.

¹⁵ As stated in the Sierra Club’s Comments at 6:

Reading section 202(c) to permit direct enforcement of reliability requirements through emergency orders would bypass the limits and procedures that Congress enacted in section 215 to constrain such enforcement. See *California Independent System Operator Corp. v. FERC*, 372 F.3d 395, 401-2 (D.C. Cir. 2004) (“Congress’s specific and limited enumeration of [agency] power over [particular matter] in [one section of Federal Power Act] is strong evidence that [separate section] confers no such authority on [agency].”).

¹⁶ See 10 C.F.R. § 205.371.

A Section 202(c) Emergency Order may only be issued to address “a specific inadequate power supply situation.”¹⁷ FES can point to no such specific situation and only provides general arguments about what could happen years down the road. In *Richmond Power*, the Commission declined, as improper under Section 202(c), a request to use emergency authority to address “broad questions of resource allocation,” and the D.C. Circuit affirmed.¹⁸ To attempt to enact broad-based sweeping changes through emergency authority is not only ill-advised, but illegal. The Secretary should reject FES’s Request for the same reasons the Commission declined to act under Section 202(c) in the case that led to the *Richmond Power* opinion by the D.C. Circuit.

B. The Scope of the Requested Emergency Order is Unprecedented, Overbroad, and Impermissibly Seeks to Override Existing Statutory and Regulatory Authority and FERC and DOE Precedent.

1. The scope of the Request is inconsistent with the Department’s prior issuances of Emergency Orders.

In the Request, FES seeks an Emergency Order directing “certain existing nuclear and coal-fired generators in PJM...to enter into contracts and all necessary arrangements with PJM, on a plant-by-plant basis...”¹⁹ As to those “certain existing nuclear and coal-fired generators in PJM,” FES attaches to the Request a list (Attachment A) with nuclear and coal-fired generating units in PJM, many of which are not owned by FES. Aside from requesting overbroad relief that lacks specificity and is not tied to discrete issues at specific units it owns, FES violates the legal principle of standing by seeking relief for facilities it does not own.²⁰

¹⁷ 10 C.F.R. § 205.371.

¹⁸ *Richmond Power and Light v. Federal Energy Reg. Comm.*, 574 F.2d 610, 615-16 (D.C. Cir. 1978) (rejecting a claim that the 1973 oil embargo warranted an order, the court said that Section 202(c) is “aimed at situations in which demand for electricity exceeds supply and not at those in which supply is adequate but a means of fueling its production is in disfavor”).

¹⁹ Request at 1.

²⁰ In response to FES’s Request, PJM has noted that FES’s Request curiously seeks relief for FES’s entire merchant fleet as well as relief for all other coal and nuclear units in PJM, totaling over 80 generation units. PJM Letter to

Past Emergency Orders issued by the Department have been narrow in scope, with most directed toward one facility, and all focused on the provision of power to a specific geographical area.²¹ For example, Emergency Orders issued in 2002 and 2003 were specifically directed toward the Cross-Sound Cable connecting Connecticut to Long Island.²² An Emergency Order issued in 2005—in response to “massive destruction” by Hurricane Rita—authorized CenterPoint Energy to temporarily connect electricity lines to restore power to Entergy Gulf States, Inc.

The few orders that reached beyond one or two facilities were still narrowly tailored. For example, arguably the broadest use of emergency order authority by the Department was in response to the massive and unprecedented California energy crisis in 2000-2001.²³ Secretaries Richardson and Abraham issued a short series of Emergency Orders on approximately a weekly basis, requiring specific facilities to “generate, deliver, interchange, and transmit electricity” when requested by the California ISO. These Orders generally expired within approximately two weeks, and the entire series of Orders spanned less than two months.

As to the PJM territory, the Department has issued emergency orders for only two facilities: a 2005 Emergency Order (and follow-up orders) related to Mirant Corporation’s Potomac River

Secretary Perry re FES’s Request for Emergency Relief under Section 202 of the Federal Power Act at fn. 1 (Mar. 30, 2018).

²¹ See *DOE’s Use of Federal Power Act Emergency Authority*, Department of Energy, available at <https://www.energy.gov/oe/services/electricity-policy-coordination-and-implementation/other-regulatory-efforts/does-use> (last visited Apr. 3, 2018). Assistant DOE Secretary has stated that DOE “would never use” emergency orders for uneconomic plants. See article by Gavin Bede, *Utility Dive* (Feb. 20, 2018). Available at <https://www.utilitydive.com/news/doe-would-never-use-emergency-order-for-uneconomic-plants-walker-says-1/517455/> (last accessed Apr. 5, 2018).

²² In August 2002, responding to concerns about the availability of electricity on Long Island, an Emergency Order was issued directing Cross-Sound Cable Company to operate the Cross-Sound Cable from Connecticut to Long Island and related facilities. In August 2003, DOE required Cross-Sound Cable Company to operate its facilities in response to the blackout under the direction of the New York Independent System Operator and ISO New England.

²³ See *California December 2000*, Department of Energy, available at <https://www.energy.gov/oe/downloads/federal-power-act-section-202c-california-december-2000> (last accessed Apr. 5, 2018).

Generating Station and a 2017 Emergency Order (and follow-up orders) related to Dominion Energy Virginia's Yorktown Units 1 and 2.²⁴ In contrast to the FES Request, both of these Emergency Orders were (1) targeted to a specific city or geographical area, (2) designed to be temporary until new transmission could be put in service, and (3) issued to maintain specific generation units where closing of the units was recent or imminent.

In 2005, Mirant Corporation ceased generation at its coal-fired Potomac River station due to air quality concerns raised by the Virginia Department of Environmental Quality.²⁵ The day of the closure, the District of Columbia Public Service Commission ("DCPSC") requested that the Department find that a Section 202(c) emergency existed. DCPSC's petition to the Secretary stated that the plant's shutdown would "have a drastic and potentially immediate effect on the electric reliability in the greater Washington, D.C. area."²⁶

The Department reviewed DCPSC's petition and considered comments, issuing Emergency Order 202-05-3 approximately four months after receiving the petition.²⁷ The Department recognized the Potomac River plant was one of only three sources of electricity serving the Washington, D.C. central business district. The Department concluded that to maintain a "minimally reliable electric power system, the plant must be available to run" when one of the other two sources of power (two 230 kV transmission lines) was out of service. The Department found an emergency existed based on a combination of factors, including "the reasonable

²⁴ *DOE's Use of Federal Power Act Emergency Authority*, Department of Energy, available at <https://www.energy.gov/oe/services/electricity-policy-coordination-and-implementation/other-regulatory-efforts/does-use> (last visited April 4, 2018).

²⁵ Emergency Petition and Complaint of the District of Columbia Public Service Commission, DOE Docket No. EO-05-01, FERC Docket No. EL05-145-000 (Aug. 24, 2005) at 1, available at https://www.energy.gov/sites/prod/files/oeprod/DocumentsandMedia/mirant_082405.pdf.

²⁶ *Id.* at 1-2.

²⁷ DOE Order No. 202-05-3 (Dec. 20, 2005), available at https://www.energy.gov/sites/prod/files/oeprod/DocumentsandMedia/mirant_122005_2.pdf.

possibility an outage will occur that would cause a blackout, the number and importance of facilities and operations in our Nation's Capital . . . the extended number of hours of any blackout . . . and the fact that the current situation violates applicable reliability standards.” The original Order 202-05-3 expired in October 2006 but was renewed periodically until the final Order was issued in January 2007, expiring that summer.²⁸

Unlike FES's present Request, the Emergency Order for the Potomac River plant was targeted and focused. The concerns were immediate because the Nation's capital would have had only two sources of power. Further, it was a temporary measure until additional sources of power became available to Washington, D.C.

In June 2017, with Dominion Energy Virginia's support, PJM requested an Emergency Order from the Department requiring Dominion Energy Virginia to operate its coal-fired Yorktown Units 1 and 2 at the Yorktown Power Station, which had been slated for closure due to violations of environmental standards.²⁹ PJM asked that the Order require the units to operate “only as needed in order to address NERC reliability issues and other local transmission issues.”³⁰ The purpose of the request was “to preserve the reliability of [the] bulk power transmission system in the North Hampton Roads [Virginia] area.”³¹ PJM articulated an immediate need for an order to prevent uncontrolled power disruptions and shedding of critical loads during the peak summer

²⁸ See DOE Order No. 207-07-2, Docket No. EO-05-01 (Jan. 31, 2007), available at <https://www.energy.gov/sites/prod/files/oeprod/DocumentsandMedia/EO-05-01.pdf>; DOE Order No. 202-07-3, Docket No. EO-05-01 (Jul. 2, 2007) (indicating Order No. 207-07-2 expired on July 1, 2007), available at https://www.energy.gov/sites/prod/files/oeprod/DocumentsandMedia/DOE_Order_202-07-3.pdf.

²⁹ Dominion Energy Virginia had notified PJM of its intention to deactivate the Yorktown units as of the end of 2014, prompted by the Environmental Protection Agency's Mercury and Air Toxics Standards requirements. See PJM Request for Emergency Order Pursuant to Section 202(c) of the Federal Power Act (Jun. 13, 2017) at 5, available at <https://www.energy.gov/sites/prod/files/2017/07/f35/PUBLIC-DOE%20FPA%20202%28c%29%20Emergency%20Application%20Dominion%20Yorktown%201%20%202%20-6-13...0.pdf>.

³⁰ *Id.* at 15.

³¹ *Id.* at 1.

months which were quickly approaching. PJM had ordered expanded transmission capacity to the North Hampton Roads area, but Yorktown Units 1 and 2 were needed in the interim; PJM also suggested the transmission expansion would require outages, which could, in turn, require the Yorktown Units 1 and 2 to operate. The Department issued Emergency Order 202-17-2 on June 16, 2017. Orders have been reissued approximately every 90 days to maintain Yorktown Units 1 and 2.³²

Unlike the FES Request, the Yorktown Emergency Order was narrowly tailored to a specific and imminent reliability need. PJM stated that its request was “in no way . . . intended as a substitute for the need for transmission infrastructure on the Virginia Peninsula,” but needed only until adequate transmission infrastructure could be placed into service and only for the two Yorktown units.³³

In short, the Department has never exercised Section 202(c) authority in response to a perceived crisis that was several years away and has never exercised Section 202(c) authority anywhere close to the degree requested by FES. Instead, the Department has carefully used Section 202(c) authority to address present-time shortfalls in electricity supply through narrowly tailored solutions. Because FES fails to tailor and limit its request to specific shortfalls in electric supply at specific geographical locations, the Request should be rejected.

2. The Request seeks to vest the Department with ratemaking authority that properly resides with the Federal Energy Regulatory Commission.

³² *Id.* at 6.

³³ Summary of PJM Interconnection LLC’s Request For Emergency Order Pursuant to Federal Power Act Section 202(c) (Jun. 13, 2017), available at <https://www.energy.gov/sites/prod/files/2017/07/f35/DOE%20Dominin%20Yorktown%20FPA%20Section%20202%20Petition%20Summary%20Final%206-13-17%20.pdf>.

Title IV of the DOE Act provides for the creation of the Commission as an “independent regulatory commission.”³⁴ Under Section 402 of the DOE Act, the Commission is vested with the authority to enforce Part II of the Federal Power Act. The Commission’s jurisdiction is exclusive.³⁵ Section 401(f) provides that the Commission is authorized to establish such procedural and administrative rules as are necessary to exercise its functions. Additionally, Section 403(c) provides that “[a]ny function described in section 402 of this Act which relates to the establishment of rates and charges under the Federal Power Act...may be conducted by rulemaking procedures.”³⁶

Although the Secretary has the authority to issue an Emergency Order where an urgent need necessitates it, that authority does *not* include dictating rates, as FES asks the Secretary to do here. The DOE Act explicitly states, “[t]he decision of the Commission involving any function within its jurisdiction...*shall not* be subject to further review by the Secretary.”³⁷ Despite this provision, FES asks the Secretary, if affected parties cannot negotiate new contractual terms in 15 days, to “step in and *determine* the just and reasonable compensation and conditions.”³⁸

This request contravenes the Department’s own regulations. 10 C.F.R. § 205.376 states that if parties affected by an Emergency Order are unable to reach an agreement as to rates, the Department “shall refer the rate issues to the Federal Energy Regulatory Commission.” Consequently, this Request asks DOE to impermissibly override its own regulations (which have the force of law and are subject to notice-and-comment rulemaking procedures). Because FES

³⁴ 42 U.S.C. § 7171(a). As an independent regulatory commission, “the members, employees, or other personnel of the Commission shall not be responsible to or subject to the supervision or direction of any officer, employee, or agent of any other part of the Department [of Energy].” 42 U.S.C. § 7171(d).

³⁵ 42 U.S.C. § 7172(g).

³⁶ 42 U.S.C. § 7173(c).

³⁷ 42 U.S.C. § 7172(g) (emphasis added).

³⁸ Request at 32 (emphasis added).

requests no new connections to provide electric service, it effectively is asking for an Emergency Order on rates alone. However, the Department explicitly cannot grant FES's request that it directly set "just and reasonable rates." That jurisdiction lies with FERC, not the Department. Further, FERC has already exercised its authority to set "just and reasonable rates" and has rejected proposals similar to FES's Request. In Docket No. RM18-1-000, the Commission held that establishing cost-of-service rates for "all eligible resources . . . regardless of need or cost to the system" had not been demonstrated to be just and reasonable.³⁹ If FES believes FERC errs in its determination of just and reasonable rates in any particular rate proceeding, it may appeal to the D.C. Circuit—not the Secretary of Energy.

3. The Request seeks relief that does not constitute "just and reasonable" compensation under the Federal Power Act.

The wholesale compensation mechanisms of the Regional Transmission Organizations ("RTOs") and Independent System Operators ("ISOs") that would be affected by the Request are established through FERC-approved tariffs that the Commission must find are just and reasonable.⁴⁰ To alter those tariffs, the Commission—not the Department—must find that the current tariffs are not just and reasonable before it may determine a just and reasonable replacement rate.⁴¹ Under Section 206 of the Federal Power Act ("FPA"), the burden of proof to show that any rate, charge, classification, rule, regulation, practice, or contract is unjust, unreasonable, unduly discriminatory, or preferential is on the proponent of the new rate.⁴² It is not enough to claim that the rates are unreasonable because unit owners may be required to close

³⁹ Grid Resilience in Regional Transmission Organizations and Independent System Operators, 162 FERC ¶ 61,012 at P 16 (Jan. 8, 2018).

⁴⁰ 16 U.S.C. § 824d.

⁴¹ 16 U.S.C. § 824e.

⁴² 16 U.S.C. § 824e(b); *FirstEnergy Serv. Corp. v. FERC*, 758 F.3d 346, 354 (D.C. Cir. 2014).

uneconomic generation units. Providing economic signals to unit owners is the very point of market-based compensation and the just and reasonable market rules that are in place to determine market-based compensation.⁴³ Accordingly, the potential closing of generation units does not demonstrate that rates that have been found to be just and reasonable have suddenly become unjust and unreasonable.

FES's Request complains that the market-based rates in PJM do not generate sufficient revenue (while failing to mention both the billions of dollars utilities received for stranded costs during state restructuring processes and the high prices and high profits these same units commanded in the mid-2000s). For example, customers in Pennsylvania,⁴⁴ New Jersey,⁴⁵ and Ohio⁴⁶ paid billions in stranded costs. FES proposes new "just and reasonable" rates but has never

⁴³ See Murray Energy Comments at 19, FERC Docket RM18-1-000 ("While other issues—including increasing environmental burdens for coal and rising operating costs for nuclear—were contributing factors, the core issue boils down to economics. If wholesale prices were higher, for example, it would be profitable for a coal plant to install new emission scrubbers and the magnitude of coal and nuclear retirements would be significantly lower.").

⁴⁴ In Pennsylvania, customers paid the Pennsylvania jurisdictional utilities approximately \$12.3 billion in stranded costs. Stranded cost determinations were not changed in Pennsylvania when energy market prices were, in actuality, much higher than projected in the stranded cost proceedings. As such, generation owners, many of which were affiliates of the jurisdictional utilities, realized the upside benefit of higher LMPs while customers continued to make stranded cost payments. See *Application of Metropolitan Edison Company for Approval of its Restructuring Plan Under Section 2806 of the Public Utility Code, et al.*; *Application of Pennsylvania Electric Company for Approval of its Restructuring Plan Under Section 2806 of the Public Utility Code, et al.*, Docket Nos. R-00974008, et al., and R-00974009, et al., Final Opinion and Order (Oct. 20, 1998); *Pennsylvania Public Utility Commission v. Pennsylvania Power Company (Application for Approval of A Restructuring Plan Under Section 2806 of the Public Utility Code)*, Docket No. R-00974149, Final Order (May 3, 1999) (adopting Tentative Order entered Apr. 1, 1999); *Application of PECO Energy Company for Approval of its Restructuring Plan Under Section 2806 of the Public Utility Code, et al.*, Docket Nos. R-00973953 and P-00971265, Final Order (May 14, 1998); *Re West Penn Power Company*, 91 Pa. PUC 700 (Order entered Nov. 19, 1998).

⁴⁵ In New Jersey, customers paid approximately \$2.94 billion for net-of-tax stranded costs. *In re Public Service Elec. and Gas Company's Rate Unbundling, Stranded Costs and Restructuring Filings*, 330 N.J. Super. 65, 116 (App. Div. 2000), *affirmed* 167 N.J. 377, 771 A.2d 1163 (2001); see also *Murphy v. Public Serv. Elec. & Gas Co.*, 2009 N.J. Super. Unpub. LEXIS 309 (App. Div. 2009).

⁴⁶ Like other states, Ohio provided for stranded cost recovery and authorized approximately \$8.4 billion in electric transition plans. See Docket Nos. 99-1729-EL-ETP, Opinion and Order at 11 (9/28/00), <http://dis.puc.state.oh.us/ViewImage.aspx?CMID=WQWKCC2QHW8Q0Q92>; 99-1658-EL-ETP, Opinion and Order at 23 (8/31/00), available at: [http://dis.puc.state.oh.us/ViewImage.aspx?CMID=ROHRQ\\$ZFW2EZ9YSU](http://dis.puc.state.oh.us/ViewImage.aspx?CMID=ROHRQ$ZFW2EZ9YSU); 99-1687-EL-ETP, Testimony of Ralph Luciani at Exhibit RLL-6 (12/20/99), available at: [http://dis.puc.state.oh.us/ViewImage.aspx?CMID=LL8IYWPXY9KXIB\\$@](http://dis.puc.state.oh.us/ViewImage.aspx?CMID=LL8IYWPXY9KXIB$@); PUCO Case No. 99-1212-EL-ETP, Opinion and Order at 31 (7/19/00), available at: [http://dis.puc.state.oh.us/ViewImage.aspx?CMID=SK29QJKYOP1\\$BUO\\$](http://dis.puc.state.oh.us/ViewImage.aspx?CMID=SK29QJKYOP1BUO); Supplemental Testimony of Waggoner at HLW-1S, 2S, 3S (4/4/00), available at:

demonstrated that the existing rates—*rates approved by the Commission*—are unjust and unreasonable. In effect, FES equates the poor economics of its units with unreasonable rates.⁴⁷ A guarantee of positive annual revenue in a competitive market, however, is not required by the United States Constitution or the Federal Power Act.⁴⁸

4. The Request ignores decades of precedent by seeking cost-based rates that seek to reverse the owner's write-down of the asset value.

Throughout the Request, FES asks the Department to order PJM to enter cost-based contracts with many generation assets, overturning FERC decisions granting market-based rate authority to generation assets such as those of FES. In essence, FES is proposing to “have its cake and eat it too.” FES is requesting that PJM customers be forced to pay cost-based rates for power from nuclear and coal facilities through “full recovery of [the generator’s] fully allocated costs and a fair return on equity.”⁴⁹

In making this request, FES is prodding the Secretary to take dramatic steps in contravention of FERC policy set forth in Order No. 697, overriding FERC’s authority and

<http://dis.puc.state.oh.us/ViewImage.aspx?CMID=SLQYV6XHZZIUF95R>. FirstEnergy’s stranded cost total authorized in its electric transition plan was approximately \$6.41 billion (\$5.25 billion for out-of-market generation and \$1.16 billion for regulatory assets). PUCO Case No. 99-1212-EL-ETP, Opinion and Order at 31 (7/19/00), available at: [http://dis.puc.state.oh.us/ViewImage.aspx?CMID=SK29QJKYOPISBUO\\$](http://dis.puc.state.oh.us/ViewImage.aspx?CMID=SK29QJKYOPISBUO$); Supplemental Testimony of Waggoner at HLW-1S, 2S, 3S (4/4/00), available at: <http://dis.puc.state.oh.us/ViewImage.aspx?CMID=SLQYV6XHZZIUF95R>.

⁴⁷ See, e.g., Exelon Comments at 9, FERC Docket No. RM18-1-000. There is also a substantial inconsistency in the claims the parties are making as to the failures inherent in the market-based approaches of the RTOs and ISOs. For example, the Nuclear Energy Institute complains about the effect of short term prices while simultaneously pointing out that other social goals are embedded in retail and wholesale pricing. NEI Comments at 3-4, FERC Docket No. RM18-1-000.

⁴⁸ *Market Street Railway Co. v. California Railroad Comm'n*, 323 U.S. 548 (1945); *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944) (regulation under the parallel provisions of the Natural Gas Act does not ensure that the business will produce net revenue).

⁴⁹ Request at 31. Specifically, FES asks that the Emergency Order apply to unregulated “nuclear and coal-fired generators located within the PJM footprint” that are compliant with environmental laws and possess certain levels of on-site fuel storage. *Id.*

imposing non-market prices on uneconomic assets. FES's assertion that these actions would result in "just and reasonable rates" ignores decades of FERC precedent.

FES's Request does not stop with a request for cost-based compensation; it also asks that recent impairments/write-downs, taken by FES and other asset owners consistent with accounting standards, be ignored in cost-of-service calculations. In Footnote 172 of the Request, FES states that "the traditional cost-of-service model needs to be modified" to be additionally favorable to FES and other generators. FES contends:

Certain nuclear and coal-fired units have, for financial reporting purposes, impaired the generating asset values based on the expectation that market revenues would not be sufficient to provide a return of and on invested capital. The fact that these assets were impaired for financial reporting purposes does not change the amount that was invested in the plant nor does it relieve their owners from their obligations to bondholders. *As a result, the traditional cost-of-service model needs to be modified* to allow cost recovery based on pre-impairment asset values or it needs to be modified to allow a return on equity on the post-impairment asset value with an additional allowance for recovery of maturing debt in addition to interest expense.⁵⁰

Even in situations where nuclear and coal-fired units have taken impairments—writing off the value of the asset—FES requests *full* cost-based recovery, *even on the value of the write-down*. Put simply, FES wants the Department to (1) magically restore, in contravention of FERC precedent, the full value of its assets; and (2) dictate that customers pay for FES shareholders to earn a "fair return on equity" of this full value. FES provides no support for this aspect of its Request.

On the merits, this Request should fail for many of the same reasons FERC rejected the proposed rulemaking in its Grid Reliability and Resilience Pricing rulemaking proceeding at Docket No. RM18-1-000. It is fundamentally unfair to require customers to fund FES and other generators' "double dip"—benefitting from "original" asset value even after impairing the assets.

⁵⁰ Request at 31-32, fn. 172 (emphasis added).

FES has failed to demonstrate that its chosen units are actually needed to serve load and has failed to explain whether its proposed compensation should be net of market revenues. Further, its proposed solution, implemented by an emergency order, would neglect the cost controls imposed by proper cost-based ratemaking.

Energy customers in the PJM Region have already shouldered the costs of paying the asset owners at least once through regulated rates (return of, and on, capital investment), again through stranded cost recovery in several states, and once more when high natural gas prices in the mid-2000s drove energy market prices to higher levels. Now that these same energy customers are beginning to realize some benefit from Locational Marginal Pricing (“LMP”) occasioned by drops in natural gas prices, FES asks for an Order declaring an “emergency” and providing unprecedented and unlawful relief. The hyperbole and language of “crisis” used by FES reflects a desperate attempt by FES to prop up certain failing assets and deliver to its shareholders an investment return to which they are not entitled. The Request seeks relief that is impermissible; the Request should be denied.

C. FES Has Not Substantively Demonstrated that an Emergency Exists.

An emergency is “an unexpected inadequate supply of electric energy which may result from the unexpected outage or breakdown of facilities for the generation, transmission or distribution of electric power.”⁵¹ Emergencies are caused by: (1) weather conditions, (2) acts of God, (3) unforeseen, unpreventable circumstances, (4) sudden increase in customer demand, (5) inability to obtain adequate amounts of the fuels necessary to generate electricity, or (6) regulatory action prohibiting certain power supply facilities.⁵² FES has failed to demonstrate “a specific

⁵¹ 10 C.F.R. § 205.371.

⁵² 10 C.F.R. § 205.371.

inadequate power supply situation” caused by any of those scenarios.⁵³ Economic circumstances resulting from a changing generation resource landscape do not constitute a sudden emergency requiring immediate action. In response to FES’s Request, PJM stated: “without reservation there is no immediate threat to system reliability.”⁵⁴

1. PJM is not facing premature retirements of coal and nuclear generating facilities; rather, units are retiring due to correct economic signals.

In the Request, FES argues that FERC and PJM are allowing premature retirements of coal and nuclear generating facilities and argue immediate action is necessary to avert a crisis. Despite FES’s claims to the contrary, capacity reserve margins are ample in the PJM Region. Retirement decisions have been based upon fundamental economics, involving many generation facilities that have reached the end of their normal lives. These retirements cannot be accurately characterized as *premature*.⁵⁵ Nuclear units that have retired have done so based upon multiple factors, including equipment repairs that became unfeasible. Further, the minimal use of Reliability Must Run (“RMR”) agreements demonstrates that the organized market regions are by no means facing the loss of critical generation facilities.

a. Ample capacity reserve margins in PJM demonstrate that retirements have not been premature.

In PJM, the most recent BRA for capacity, for the 2020/2021 Delivery Year, cleared reserves of 23.3 percent—or 6.7 percentage points higher than the targeted minimum required reserve level of 16.6 percent.⁵⁶ The fact that 165,109.2 megawatts (“MW”) of unforced capacity

⁵³ 10 C.F.R. § 205.371.

⁵⁴ PJM Letter to Secretary Perry re FES’s Request for Emergency Relief under Section 202 of the Federal Power Act at 1 (Mar. 30, 2018).

⁵⁵ See Request at 12.

⁵⁶ See 2020-2021 BRA Results, available at <https://www.pjm.com/~media/markets-ops/rpm/rpm-auction-info/2020-2021-base-residual-auction-report.ashx> (last accessed Apr. 5, 2018).

producing reserves of 23.3 percent in PJM cleared in the BRA does not even tell the whole story.⁵⁷ The amount of capacity in PJM greatly exceeds the amount of cleared resources, with a total of 189,917.8 MW of capacity offered into the 2020/2021 BRA. Resources that were eligible to participate in the auction exceeded this amount, and totaled 212,995.6 MW.⁵⁸ By any measure, PJM does not face a capacity shortfall.

Interconnection queues for new generation facilities are also quite robust. For example, based upon a recent report, there are over 60,000 MW of new generation resources in various stages of PJM's interconnection queue.⁵⁹ The fact that most of this new generation is planned as renewable or gas-fired resources simply reflects the current economics of constructing new generation facilities. Clearly, recent attempts to construct new coal-fired and nuclear facilities have not proved to be great success stories.⁶⁰ Under these circumstances, and given continued and projected low natural gas prices, it logically follows that interconnection queues are dominated by renewable and gas-fired generation facilities. While not all planned generation facilities in the queue will ultimately be placed in service, many of them will be. This reality is not reflected anywhere in the FES Request.

Clearly, there is no current or imminent shortage of generation resources that warrants any action, much less the type of action contemplated in the Request. The fact that some existing coal-

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ PJM Interconnection, L.L.C., *PJM Interconnection Queue Status & Statistics Update Database Snapshot on 04/24/2017* at 16 (May 4, 2017), available at <http://www.pjm.com/-/media/committees-groups/committees/pc/20170504/20170504-item-12-pjm-queue-status-update.ashx> (last accessed Apr. 4, 2018).

⁶⁰ See The Post and Courier, *Two identical nuclear projects, one in Georgia and one in South Carolina. Only one survived* (Oct. 29, 2017), available at http://www.postandcourier.com/news/two-identical-nuclear-projects-one-in-georgia-and-one-in/article_4954353a-b8f6-11e7-be85-f341791366a7.html (last accessed Apr. 4, 2018). See also Mississippi Public Service Commission, *Mississippi Power Company to Suspend Lignite Coal Gasification at Kemper Co. Power Plant* (June 28, 2017), available at <http://www.psc.state.ms.us/mpsc/press%20releases/2017/Mississippi%20Power%20Company%20to%20Suspend%20Lignite%20Coal%20Gasification%20at%20Kemper%20Co.%20Power%20Plant.pdf>.

fired and nuclear generating facilities have recently retired, or plan in the near future to retire, is simply a function of market economics.⁶¹

b. Many coal-fired generation facilities have reached the end of their remaining useful life, triggering retirement.

Nationwide, the coal units that were retired in 2015 were mainly built between 1950 and 1970, and the average age of those retired units was 54 years. The rest of the coal fleet that continues to operate is relatively younger, with an average age of 38 years.⁶² The coal units retired in 2015 also tended to be smaller than the rest of the coal fleet. The net summer capacity of the average retired coal unit was 133 MW, compared with 278 MW for the average coal units still operating.⁶³ Coal plants in these vintages have a typical design life of between 30 to 40 years.⁶⁴ Thus, the coal-fired power plants that have recently retired are beyond their design life,⁶⁵ and their smaller size makes them generally less economic to run. This reality is not reflected in the FES Request.

c. Nuclear plant retirements have been driven by economics, local politics, and equipment failures.

FES argues that PJM does not value resiliency and therefore does not appropriately compensate resources like nuclear and coal. An examination of recent nuclear plant retirements

⁶¹ Given the current market disincentives, this process makes intuitive sense. With lower wholesale prices of electricity due to falling natural gas prices and increasing low marginal cost renewables, coal and nuclear plants make less money and become increasingly financially distressed. Eventually, dismal revenue projections and falling profits lead to a management decision to shed unprofitable assets. While other issues—including increasing environmental burdens for coal and rising operating costs for nuclear—were contributing factors, *the core issue boils down to economics*. If wholesale electricity prices were higher, for example, it would be profitable for a coal plant to install new emission scrubbers and the magnitude of coal and nuclear retirements would be lower. Murray Energy Comments at 19 (emphasis added).

⁶² See EIA Mar. 8, 2016 *Electric Generator Inventory*.

⁶³ *Id.*

⁶⁴ See American Public Power Association, *Michigan's Lansing BWL to close coal-fired power plant by end of 2025* (Aug. 25, 2017), available at <https://www.publicpower.org/periodical/article/michigans-lansing-bwl-close-coal-fired-power-plant-end-2025> (last accessed Apr. 4, 2018).

⁶⁵ See Power, *America's Aging Generation Fleet* (Jan. 28, 2013), available at <http://www.powermag.com/americas-aging-generation-fleet/?printmode=1> (last accessed Apr. 4, 2018).

nationwide supports the conclusion that the retirements have been driven by economics and equipment failures that proved too costly to repair, or resulted from negotiations with state or local officials who were concerned over continued operation of the facilities.⁶⁶

In the PJM territory, Exelon Corporation agreed to cease electric generation operations at the Oyster Creek Generating Station by December 31, 2019. The agreement was part of a negotiated settlement with the State of New Jersey intended to ensure that water withdrawals from Barnegat Bay for cooling purposes and discharges from the plant did not damage the ecological health of the Bay.⁶⁷

⁶⁶ This trend is not isolated to PJM. In January of 2017, Entergy announced that it had reached an agreement with the State of New York to shut down the Indian Point nuclear station by 2021 rather than continuing to fight legal battles over renewal of licenses. See Entergy, *Entergy, NY Officials Agree on Indian Point Closure in 2020-2021* (Jan. 9, 2017), available at <http://www.entergynewsroom.com/latest-news/entergy-ny-officials-agree-indian-point-closure-2020-2021/> (last accessed Apr. 4, 2018). Entergy also cited economic factors as contributing to the decision to shut down the facility. Dominion Energy elected to close the Kewaunee Power Station in Wisconsin in 2013 after failing to find a buyer. See USA Today, *Kewaunee County ready to move on after nuclear plant closing* (July 12, 2017), available at <https://www.usatoday.com/story/news/investigations/2017/07/12/kewaunee-nuclear-plant-closing/103598506/> (last accessed Apr. 4, 2018). Dominion said the decision was based purely upon economics, as the plant lacked economies of scale and falling natural gas prices had lowered wholesale power prices. Owners of the San Onofre nuclear power plant made the decision to close the facility in 2013, after a project to replace steam generators went poorly. See The Orange County Register, *San Onofre nuclear plant to shut permanently, Edison says* (June 8, 2013), available at <http://www.ocregister.com/2013/06/08/san-onofre-nuclear-plant-to-shut-permanently-edison-says/> (last accessed Apr. 4, 2018). Duke Energy announced in 2013 that it would close the Crystal River nuclear facility in Florida after construction workers cracked the wall of the containment building during a project to replace steam generators. See Tampa Bay Times, *Duke Energy announces closing of Crystal River nuclear power plant* (updated Feb. 11, 2014), available at <http://www.tampabay.com/news/business/energy/duke-energy-announces-closing-of-crystal-river-nuclear-power-plant/1273794> (last accessed Apr. 4, 2018). Pacific Gas & Electric Co. announced in June 2016 that it would shut down its Diablo Canyon nuclear reactors when their operating licenses expire in 2024 and 2025. However, the decision to shut down the reactors was the result of a negotiated settlement with environmental organizations. See Los Angeles Times, *PG&E to close Diablo Canyon, California's last nuclear power plant* (June 21, 2016), available at <http://www.latimes.com/business/la-fi-diablo-canyon-nuclear-20160621-snap-story.html> (last accessed Apr. 4, 2018). Vermont Yankee Nuclear Power Station closed in December 2014. Entergy's decision to shut down the facility resulted from negotiations with state officials who objected to continued operation of the facility. See State of Vermont Public Service Department, *Brief History of Vermont Nuclear Power* (2017), available at <http://publicservice.vermont.gov/content/nuclear-decommissioning-citizens-advisory-panel-ndcap/history>. Entergy announced in December 2016 that it planned to close the Palisades nuclear generating facility in Michigan on October 1, 2018. On September 28, 2017, Entergy announced it was reversing its decision and would operate the facility at least until the spring of 2022. See Entergy, *Entergy to Continue Operating Palisades Power Plant Until Spring 2022* (Sept. 28, 2017), available at <http://www.palisadespower.com/entergy-to-continue-operating-palisades-power-plant-until-spring-2022/> (last accessed Apr. 4, 2018).

⁶⁷ See State of New Jersey Department of Environmental Protection, *Comprehensive Plan of Action Item #1 Close Oyster Creek Nuclear Power Plant* (last updated June 16, 2016), available at <http://www.nj.gov/dep/barnegatbay/plan-oystercreek.htm>.

These decisions to operate or close existing reactors illustrate that nuclear plant retirements are not being driven by RTO power market rules and, thus, the relief being sought by FES would have no impact on those closures. In some cases, local politics and equipment failures have led to decisions to retire or to continue to operate nuclear generating facilities. In fact, three of these closures (Kewaunee, San Onofre, and Crystal River) are not even located in regions of the country that would be subject to the Emergency Order. Thus, the claim that “PJM has done little to prevent this emergency,” or that RTO market rules are driving *premature* nuclear plant retirements does not withstand scrutiny.⁶⁸

d. The use of RMR agreements has been infrequent.

The RMR process provides PJM with the ability to keep essential assets online if, and only to the extent that, a reliability problem exists. PJM does use this process on occasion when needed. However, PJM has used the process infrequently, further confirming that generation needed for reliability or “resilience” is not retiring and certainly not retiring prematurely.⁶⁹

The nation is not facing *premature* retirements of coal and nuclear generating facilities; rather, these generating units are retiring due to correct economic signals or for reasons completely unrelated to PJM market rules. Not only is there no emergency, but PJM’s process is working by facilitating the exit of uneconomic and inefficient old generation and facilitating the entry of economic and efficient new generation. It would be inappropriate for the Secretary to issue an Emergency Order that would fundamentally disrupt the entry and exit signals that are currently being provided by the PJM market.

⁶⁸ See Request at 1.

⁶⁹ American Manufacturers Comments at 34-39.

2. The recent Bomb Cyclone weather events and resulting NETL Report do not justify FES's request for DOE to prop up uneconomic coal and nuclear units in PJM.

In its Request, FES relies heavily on a recently released a DOE-sponsored National Energy Technology Laboratory report (“NETL Report”).⁷⁰ The NETL Report states that some coal-fired generating units were a prominent example of “resilience in action” in PJM during the “Bomb Cyclone” winter weather events in late December 2017 to early January 2018.⁷¹ However, the NETL Report’s conclusion about the resiliency of existing coal units in PJM is based on a limited comparison between the increase in coal generation during the Bomb Cyclone and the level of generation from December 1 through 26, 2017 from other resources.⁷² Importantly, the NETL Report includes an upfront disclaimer indicating that it only represents “the views and opinions of authors” that “do not necessarily state or reflect the those of the United States Government or any agency thereof.”⁷³

Despite FES’s claims, the NETL Report does not show that “immediate action” by DOE is necessary to prop up uneconomic coal and nuclear units.⁷⁴ Prior to the Bomb Cyclone, many coal generation units were idle or only partially utilized because they were uneconomic and too costly to operate. The increase in coal generation during the Bomb Cyclone shows only that those coal generators are uncompetitive unless electricity and gas prices increase significantly.⁷⁵ Instead of measuring resilience in PJM, the NETL Report “simply finds which energy sources are the most

⁷⁰ See Request at 4-9 (citing National Energy Technology Laboratory, Reliability, Resilience, and the Coming Wave of Retiring Baseload Units Volume I: The Critical Role of Thermal Units During Extreme Weather Events (Mar. 13, 2018) (“NETL Report”), available at <https://www.netl.doe.gov/research/energy-analysis/search-publications/vuedetails?id=2594>).

⁷¹ NETL Report at 12.

⁷² See NETL Report at 12.

⁷³ See NETL Report, Disclaimer page.

⁷⁴ See Sierra Club Comments at 12-15 (submitted Mar. 30, 2018 to the DOE in response to FES’s Request).

⁷⁵ Sierra Club Comments at 13.

expensive.”⁷⁶ Thus, FES’s reliance on the NETL Report’s cursory assessment that many coal units in PJM are expensive fails to support FES’s claim that those units are critically needed to meet demand or ensure resiliency or reliability.

Essentially, the NETL Report provides an assessment of the present supply curve in PJM and highlights that as load increases, RTOs move up the supply stack and increasingly commit higher cost, lower efficiency units.⁷⁷ The NETL Report appears to misconstrue typical generation operation of coming on-line when market forces are such that the price being paid for electricity is greater than the cost for the unit to produce electricity as somehow equating that to a herculean effort at providing grid resilience. Such an assessment ignores the fact that in most cases, the generation coming on-line is receiving a capacity market payment collected from consumers to provide standby service and be ready to provide output when demand or prices are high. While it is admirable that units residing in the portion of the supply stack were called on and operated as obligated, it is no less important to recognize that there likely remained higher priced units in the supply stack that were not required to operate during the Bomb Cyclone but none-the-less also received a capacity payment for the standby service that was provided.

Reliance on an assessment of resilience simply based on a cursory review of increased generation output overlooks other data points that qualify the increased output. As PJM noted, combined, 28% of its coal and oil units with on-site fuel inventories reported issues with fuel

⁷⁶ Sierra Club Comments at 13 (citing Michael Goggin, Fossil Lab Misses Mark in Cold Weather “Resilience” Report, (Mar. 28, 2018), available at <http://sustainableferc.org/fossil-lab-misses-mark-in-cold-weather-resilience-report/>.)

⁷⁷ See NETL Report at 12-18.

resupply due to fuel transportation constraints from a contribution from coal plants, with coal units most frequently reporting delays due to frozen rivers and increased barge traffic.⁷⁸

Additionally, as it relates to PJM, the NETL Report seems to value the inability of coal plants to cycle during lower priced overnight hours or lower load days of the Bomb Cyclone and equates this inflexibility to increase resilience contribution. NETL correctly identified cycling of natural gas units during the Bomb Cyclone but failed to acknowledge that the flexibility afforded by units that can cycle over holidays, lower load weekend periods, and overnight hours is a desirable characteristic that results in more efficient power market operations.⁷⁹ In fact, based on the average daily generation output metric that is used in NETL to purportedly assess plant performance and resilience contribution value, this metric is likely skewed significantly due to desired cycling of the natural gas and oil units, and its value as a meaningful metric is questionable.

As explained in Sierra Club's comments in response to FES's Request, PJM is and has been effectively ensuring system reliability and resilience during a time of shifting energy and generation resources.⁸⁰ During the Bomb Cyclone, PJM explained that "the grid and the generation fleet performed well" and that "[e]ven during peak demand, PJM had excess reserves and capacity."⁸¹ The NETL Report does not demonstrate that, after the retirement of certain coal

⁷⁸ PJM Interconnection, PJM Cold Snap Performance Dec. 28, 2017 to Jan. 7, 2018 (Feb. 26, 2018) at 16, available at <http://www.pjm.com/-/media/library/reports-notice/weather-related/20180226-january-2018-cold-weather-event-report.ashx>.

⁷⁹ See NETL Report at 15 ("wide swings in hourly output of up to 4 GW imply that increment was met by cycling natural gas combined cycle units").

⁸⁰ See Sierra Club Comments at 15.

⁸¹ Sierra Club Comments at 15 (citing PJM Interconnection, PJM Cold Snap Performance Dec. 28, 2017 to Jan. 7, 2018 (Feb. 26, 2018), available at <http://www.pjm.com/-/media/library/reports-notice/weather-related/20180226-january-2018-cold-weather-event-report.ashx>).

units, PJM will be unable to procure sufficient generation capacity to meet its reserve margin requirement from new or existing resources.

Importantly, the NETL Report does not measure resiliency and does not constitute a formal and thorough determination on resiliency. A full-scale measure and evaluation of resiliency and the range of threats to the bulk power system is occurring in the FERC Grid Resilience proceeding.⁸²

3. The Polar Vortex does not justify FES's request for DOE to prop up uneconomic coal and nuclear units in PJM.

a. PJM has already adopted changes in response to the 2014 Polar Vortex.

FES argues that the 2014 Polar Vortex (and associated cold weather spikes) justifies its request for DOE emergency action to ensure the continued operation of certain existing nuclear and coal generation facilities.⁸³ PJM has already initiated and adopted changes in response to the 2014 Polar Vortex. Thus, FES fails to reconcile its Request for an Emergency Order with the many market rule changes and generation performance enhancements that have already been implemented and have demonstrated improved system performance.⁸⁴ Instead, PJM invokes the Polar Vortex simply to argue for prolonged operations of certain coal and nuclear units because electric supply from nuclear and coal-fired generators is critical during cold weather events.

b. The 2014 Polar Vortex demonstrates that lessons learned have been successful.

The two regions most directly impacted by the 2014 Polar Vortex have already undertaken detailed reviews and have implemented market rule changes to forestall a repeat performance of

⁸² See Grid Resilience in Regional Transmission Organizations and Independent System Operators, Docket Nos. AD18-7-000; see R-18-07

⁸³ Request at 5, 9, 17.

⁸⁴ See Sierra Club Comments at 10-12 (arguing that the Polar Vortex does not justify FES's request for DOE to prop up uneconomic coal and nuclear units in PJM).

the operational issues that challenged grid performance in 2014.⁸⁵ PJM has implemented numerous changes to its market rules that include its Capacity Performance construct and changing the timing of its day-ahead scheduling deadlines to provide gas-fired generators a better ability to submit timely pipeline nominations.⁸⁶ ISO New England has also implemented market rule changes that include its forward capacity market pay-for-performance rules.⁸⁷ Even regions not directly stressed by the 2014 Polar Vortex have used it as a “lessons learned” experience and have taken steps to improve market functionality. For example, New York ISO has initiated changes to its shortage pricing rules and improved operational monitoring on fuel availability.⁸⁸ MISO has implemented over 20 specific steps to reduce risks associated with grid operation during extreme weather events.⁸⁹

Even though not all of the market rule changes have been implemented, the changes implemented prior to the winter of 2015 have already demonstrated a marked improvement in system performance. The winter of 2015 was remarkably similar to weather in 2014 as described by PJM:

The winter of 2015 was marked by cold temperatures similar to the winter of 2014 – with the coldest temperatures experienced during February 2015 throughout the

⁸⁵ The 2014 Polar Vortex and earlier severe winter weather conditions did, however, highlight operational issues that contributed to the forced outages and poor performance, and compelled examination of the underlying causes and remedies. The regions most affected—PJM and ISO-NE—undertook detailed reviews to rectify those issues. PJM and ISO-NE each found that most, if not all, of the operational issues could be addressed if generation suppliers made investments in weatherization or increased operating budgets and commitments for future fuel deliveries. Both regions proposed (and the Commission generally accepted) market solutions that: (1) pay generation resources for better performance and allow recovery of investment in operational reliability of the resource, including forward fuel costs; and (2) impose a strong monetary penalty for poor performance—with limited to no exceptions. Comments of the ISO/RTO Council at 21, *Grid Reliability and Resilience Pricing*, Docket No. RM18-1-000 (Oct. 23, 2017) (“ISO/RTO Council Comments”).

⁸⁶ PJM Comments, Appendix A at 3-7, *Grid Reliability and Resilience Pricing*, Docket No. RM18-1-000.

⁸⁷ Comments of ISO New England Inc. at 11, *Grid Reliability and Resilience Pricing*, Docket No. RM18-1-000 (Oct. 23, 2017).

⁸⁸ Comments of the New York Independent System Operator, Inc., Attachment at 5, *Grid Reliability and Resilience Pricing*, Docket No. RM18-1-000 (Oct. 23, 2017).

⁸⁹ MISO Comments, Attachment A at 20, *Grid Reliability and Resilience Pricing*, Docket No. RM18-1-000.

entire PJM footprint. Numerous cities across PJM hit their daily low-temperature records during February 2015. Due to the low temperatures and associated high electricity demand for heating needs, PJM set a new wintertime peak demand record of 143,086 megawatts the morning of Feb. 20 (hour ending 0800). The new peak record surpassed the previous all-time winter peak of 142,863 MW set Jan. 7, 2014. Some of the individual transmission zones within the PJM footprint also set all-time record winter peaks.

In addition to the extremely cold temperatures, PJM also reviewed effective temperatures or wind chill data, for select cities throughout the footprint for both 2014 and 2015. This analysis indicated January 2014 actually felt colder just about everywhere when compared to 2015, especially in Columbus, Cleveland and Chicago, where effective temperatures were between 14 and 16 degrees warmer in 2015. The significant wind chill experienced during 2014 could have contributed to the higher amount of generator forced outages encountered in 2014. By comparison, the less severe warmer effective temperature, wind chill, in 2015 may have contributed to improved generator performance.⁹⁰

PJM reported improved system performance in 2015 notwithstanding the fact that certain market rule changes, such as its Capacity Performance rules, had not been implemented:

Generator performance in February 2015 showed improvement, with forced outage rates better than in January 2014. For the morning of Feb. 20, 2015, when PJM reached a new all-time winter peak, the forced outage rate was 13.4 percent, representing 24,805 MW of generation forced out of service. Although the 2015 winter peak forced outage rates represent an improvement over the 22 percent forced outage rate during the Jan. 7, 2014, peak, the 2015 rates were still above historical “normal” winter peak outage rate of between 7 and 10 percent. The performance improvements of winter 2015 over 2014 are attributed to steps PJM and generation owners initiated after the winter of 2014 experience: pre-winter operational testing for dual-fuel and infrequently run units, a winter-preparation checklist program, better communication of fuel status and increased coordination with natural gas pipelines.

A total of 168 units (9,919 MW) participated in the pre-winter operational testing. Units that participated in the pre-winter operational testing had a lower rate of forced outages compared to those that did not test.⁹¹

⁹⁰ PJM Interconnection, L.L.C., *2015 Winter Report* at 5 (May 13, 2015), available at <http://www.pjm.com/-/media/library/reports-notice/weather-related/20150513-2015-winter-report.ashx?la=en>.

⁹¹ *Id.* at 5-6.

Other RTOs/ISOs have also reported improved operational performance due to market rule changes that were implemented following the 2014 Polar Vortex.⁹² Given the improved system performances resulting from the successful implementation of lessons learned from the 2014 Polar Vortex, FES fails to explain why reliance on cold weather occurrences during the 2014 Polar Vortex now provides an evidentiary basis for out-of-market subsidies to prolong the continued operation of certain coal-fired and nuclear generating facilities.

4. The bankruptcy filing by FES, subsequent to its Request to DOE, undermines FES's claims of "emergency."

On March 29, 2018, FES filed the instant Emergency Order Request with DOE. In FES's request, FES explained that it would likely file for bankruptcy at the end of March 2018.⁹³ On March 31, 2018—a mere two days after its Emergency Order Request—FES filed for bankruptcy in the U.S. Bankruptcy Court for the Northern District of Ohio.⁹⁴ FES's bankruptcy filing and the convenient foreshadowing of such bankruptcy two days earlier in the Emergency Order Request was a strategic business decision—not the result of an unforeseen and uncontrollable emergency. Thus, the planned bankruptcy filing by FES right after FES's Request to DOE undermines any and all claims of "emergency" by FES in the DOE request. Furthermore, the bankruptcy filing in fact solidifies and affirms FES's abuse of Section 202(c) of the Federal Power Act by engaging the DOE (and requiring the expenditure of resources by numerous stakeholders in the hours and days after FES's Emergency Order Request). The DOE should outright reject FES's request. It is not PJM's nor PJM's stakeholders' responsibility to help mitigate, resolve, or ameliorate FES's business and financial decisions that eventually gave way to FES's bankruptcy filing.

⁹² ISO/RTO Council Comments at 21-22, *Grid Reliability and Resilience Pricing*, Docket No. RM18-1-000.

⁹³ Request at 8, 20, fn. 121.

⁹⁴ See http://www.cleveland.com/business/index.ssf/2018/03/firstenergy_solutions_bankrupt.html.

5. On-site fuel supply is not a significant contribution to reliability and resilience.

FES argues that nuclear and coal-fired units are “the backbone of the electric system” because they are designed to run “24/7” with 25 days of on-site fuel availability. However, the assumption that a significant on-site fuel supply contributes to grid reliability and resilience is contradicted by factual history. Comments submitted by The Rhodium Group, LLC (“Rhodium”) to the grid resiliency rulemaking in RM18-1-000 support this conclusion. Relying upon data submitted to the EIA on Form OE-417 reports since the beginning of 2012, Rhodium found that:

[b]etween 2012 and 2016, utilities reported roughly 3.4 billion customer-hours impacted by major electricity disruptions. 96% of those lost service hours were due to severe weather (Figure 2). Fuel emergencies or deficiencies at power plants resulted in 2,382 customer hours of lost service or 0.00007% of the total. 2,333 of those customer hours were due to one event in Northern Minnesota in 2014 involving a coal-fired power plant.⁹⁵

Rhodium determined that the vast majority of customer outages were the result of damaged distribution facilities.⁹⁶ Thus, on-site fuel supply contributes little, if anything, to actual reliability and resilience. Further, the relatively short duration of most disruptive events undermines FES’s argument that 25 days of on-site fuel availability will ensure reliability and resilience.

D. If Reliability Concerns Were to Arise, PJM Has in Place Adequate Processes For Addressing Those Concerns.

PJM’s generation deactivation process adequately evaluates all generation retirements for an adverse impact on reliability. In its Open Access Transmission Tariff and in PJM Manual 14D, PJM describes a detailed process that must follow when a generation retirement is announced. After such an announcement, a timetable begins in which PJM initiates an analysis and explores

⁹⁵ Rhodium Comments at 3, *Grid Reliability and Resilience Pricing*, Docket No. RM18-1-000 (Oct. 23, 2017) (emphasis added).

⁹⁶ *Id.* at 2.

transmission solutions to enable power to continue to reliably flow to customers.⁹⁷ Generator retirements are also included in PJM's Regional Transmission Expansion Planning ("RTEP") process. PJM utilizes criteria to identify potential transmission system problems due to specific retiring. PJM may order transmission upgrades to keep the grid reliable in response to generator retirements.

PJM has in place Tariff provisions that provide adequate compensation for units that determined to be RMR units. Attachment K Appendix Section 6 is entitled "Must-Run For Reliability Generation" and addresses PJM's RMR process. The RMR process provides PJM with the ability to keep essential assets online. The RMR process is described in greater detail in Section 9.2 of PJM Manual 14D.

Under PJM Manual 14D, PJM may request a generating unit to operate past its desired deactivation date. Upon this notice, the generator may file with FERC for full cost recovery; alternatively, the generator owner may elect to receive avoidable cost compensation as per Part V of the PJM Tariff.⁹⁸

PJM has used the RMR process infrequently, indicating that generation needed for reliability or "resilience" is not retiring and certainly not retiring prematurely.⁹⁹ However, these processes provide PJM the tools to make it economic to keep generators online when necessary for grid reliability. This process, and PJM's careful management of the grid, negate the need for an Emergency Order by the Department.

⁹⁷ See PJM Manual 14D: Generator Operational Requirements § 9.1. See also <http://learn.pjm.com/three-priorities/planning-for-the-future/explaining-power-plant-retirements.aspx>.

⁹⁸ PJM Manual 14D § 9.2.

⁹⁹ American Manufacturers Comments at 34-39, Docket No. RM18-1-000.

E. If Granted, the Request Would Unnecessarily Raise Energy Prices For Consumers and Directly Undercut the Tremendous Economic Advantage to the United States from Natural Gas Shale Plays.

FES's Request to DOE seeks to impose enormous unnecessary energy costs on the American public. The advent of low priced natural gas specifically, and energy prices generally, has been, and continues to be, a monumental opportunity for the nation's energy consumers. Low natural gas prices and the resulting low energy prices in LMP-based markets provide a tremendous economic advantage to energy-intensive businesses. These businesses contribute in meaningful and tangible ways to the communities in which they are located. The natural gas Shale Plays have spearheaded a "Manufacturing Renaissance" in the United States. Requiring customers, including energy-intensive businesses, to subsidize (apparently indefinitely) large amounts of uneconomic generation sources would directly undercut this opportunity for economic growth and impede the ability of market forces to naturally select successful generation resources.

The economic benefits of shale gas production are real and tangible. The lower price of natural gas translates into lower priced electricity. As stated in *The Economist*, "In principle, all American companies and consumers benefit from lower energy prices. The effect may not always be big enough to spur heavy new investment, but it might be sufficient to keep American factories with high labor costs going in the face of foreign competition."¹⁰⁰ Economists at Citigroup and UBS predict that shale gas will lift America's Gross Domestic Product ("GDP") growth by half a percentage point a year.¹⁰¹ Indeed, less expensive energy is cited as one factor by those who have predicted a manufacturing renaissance in America.¹⁰²

¹⁰⁰ *The Economist*, *Deep sigh of relief* (Mar. 16, 2013), available at <https://www.economist.com/news/special-report/21573279-shale-gas-and-oil-bonanza-transforming-americas-energy-outlook-and-boosting-its> (last accessed Apr. 3, 2018).

¹⁰¹ *Id.*

¹⁰² *Id.*

Natural gas markets have been found to be less integrated compared to markets for other fossil fuels. As such, U.S. natural gas prices have fallen sharply and are effectively decoupled from those in the rest of the world. This offers the United States a concrete competitive advantage. If energy-intensive customers are required to subsidize uneconomic coal and nuclear generators that the RTOs have already found to be unnecessary for reliable operations, the competitive cost advantage that the Shale Plays have brought will be undercut. Simply put, the tax on businesses produced by FES's Emergency Order—if it were to be approved—would increase energy costs and would make those regions that must pay the new tax less attractive for businesses to locate or expand their operations.

Other studies have linked American natural gas development with strengthening the U.S. economy and making domestic manufacturing more competitive.¹⁰³ A report from the University of Michigan found that more than 200 mostly U.S.-based companies have participated in “onshoring” during the prior four years, motivated in part by the availability of less expensive natural gas.¹⁰⁴ Researchers at the London School of Economics found the estimated effect of the shale gas boon on gross output, employment, and capital investment within energy-intensive sectors is “positive throughout and significant.”¹⁰⁵ Their research showed that the “shale gas boom” led to a “relative expansion of energy intensive manufacturing in the U.S.”¹⁰⁶ Similarly, the researchers found that U.S. manufacturing exports grew “by about 10 percent on account of

¹⁰³ See HIS CERA, *Fueling the Future with Natural Gas: Bringing It Home* (Jan. 2014), available at <http://marcelluscoalition.org/wp-content/uploads/2014/01/Fueling-the-Future-Executive-Summary-14Jan2014.pdf> (last accessed Apr. 3, 2018).

¹⁰⁴ University of Michigan, *Shale Gas: A Game-Changer For U.S. Manufacturing* at 14 (July 2014), available at <http://energy.umich.edu/sites/default/files/PDF%20Shale%20Gas%20FINAL%20web%20version.pdf>. (last accessed Apr. 3, 2018).

¹⁰⁵ Centre for Economic Performance, *On the Comparative Advantage of U.S. Manufacturing: Evidence from the Shale Gas Revolution* at 24 (Nov. 2016), available at <http://cep.lse.ac.uk/pubs/download/dp1454.pdf> (last accessed Apr. 3, 2018).

¹⁰⁶ *Id.* at 32.

their energy intensity since the onset of the shale revolution.”¹⁰⁷ In short, the study found that the “price differential between the U.S. compared to Asia and Europe is thus likely to persist in turn helping to lift U.S. manufacturing.”¹⁰⁸ Granting FES’s Request could potentially affect the existing price differential and, thus, undercut U.S. manufacturing.

Many view the United States as currently in the midst of an energy revolution. With such rapid fundamental changes afoot, it is reasonable to expect “winners” and “losers.” Low natural gas prices may have an adverse impact on certain market participants, such as certain inefficient legacy coal units and single-unit nuclear plants. As a general matter, however, the shale gas revolution should be viewed as an opportunity to establish a competitive advantage as the vast majority of our nation’s economy that has benefited from lower energy prices. FES’s Request seeks an outcome that would undeniably increase both near-term and long-term energy costs for all customers, particularly energy-intensive businesses, while providing unprecedented financial security and subsidies to a discreet and limited class of market participants that own inefficient legacy units. Such a result cannot be viewed as sound public policy or as capable of producing just and reasonable rates, free from the Federal Power Act’s requirement that rates shall not be unduly discriminatory or preferential. In fact, such an approach threatens the economic outlook for all businesses that evaluate energy costs as a component of whether to site, maintain, or expand businesses in a particular region.

¹⁰⁷ *Id.*

¹⁰⁸ *Id.* at 33.

F. FES's Argument that Energy Price Formation in PJM Does Not Adequately Compensate Baseload Resources is Invalid and Inappropriate in an Emergency Order Request; FES's Argument on Price Formation is More Appropriately Presented and Examined in the Ongoing PJM Stakeholder Process.

In its request, FES argues there is an urgent need for reforming energy market rules surrounding price formation in order to more appropriately compensate baseload resources like coal and nuclear facilities.¹⁰⁹ Through its Request, FES seeks to undermine competitive markets and the series of the Commission's orders seeking and promulgating open access and competitive wholesale energy markets. FES's argument on energy price formation is more appropriately presented and examined in the ongoing PJM stakeholder process instead of in an emergency order request.

1. Resilience is already a critical part of reliability assessments.

In comments to the Grid Resilience proceeding in AD18-7-000/RM18-1-00, PJM explained that it already considers resilience factors because many resilience actions are "anchored in...the existing reliability standards."¹¹⁰ Resilience is a critical part of reliability assessments; however, resilience is not a wholly distinct and separate concept. FES has not demonstrated that DOE or the Commission should carve out resilience and treat it as a discrete characteristic of wholesale electricity markets. Resilience is embedded within independent reliability standards that are promulgated and enforced by the North American Electric Reliability Council ("NERC"), the not-for-profit electric reliability organization that develops and enforces reliability standards and is subject to FERC's oversight. NERC is well-positioned to provide intelligence, knowledge,

¹⁰⁹ Request at 8, 14, 16, 19, 27.

¹¹⁰ PJM Comments, Docket No. AD18-7-000 at 4 (filed Mar. 9, 2018).

metrics, and threat analyses to apply to resilience vulnerability and high-impact, low-frequency events that test grid resilience.¹¹¹

PJM has explained that the PJM Bulk Electric System is safe and reliable today because it has been designed and operated to meet all applicable reliability standards.¹¹² Therefore, the grid operator in PJM, tasked with ensuring reliability, does not contend there are safety and reliability issues in the PJM footprint. PJM, a non-profit service company, is better positioned to evaluate reliability issues and emergencies surrounding certain uneconomic generating units than FES. In a March 30, 2018 letter response to FES's Request, PJM again affirmed: "PJM can state without reservation there is no immediate threat to system reliability."¹¹³

2. FES has not demonstrated a dearth of capacity in PJM.

Not only has FES failed to demonstrate a lack of capacity in PJM, but PJM has indicated that the opposite is the case.¹¹⁴ PJM's study, *PJM's Evolving Resource Mix and System Reliability*, released in 2017, stated that "[t]he expected near-term resource portfolio is among the highest-performing portfolios and is well equipped to provide the generator reliability attributes" based on the requirements of the PJM Open Access Transmission Tariff, the PJM Operating Agreement, the PJM Reliability Assurance Agreement, and applicable NERC reliability standards.¹¹⁵ Even as the potential future resource mix moves in the direction of less coal and nuclear generation, the PJM Evolving Resource Mix Study found generator reliability attributes of frequency response,

¹¹¹ See, e.g., NERC's State of Reliability 2017 Report (June 2017), available at https://www.nerc.com/pa/RAPA/PA/Performance%20Analysis%20DL/SOR_2017_MASTER_20170613.pdf.

¹¹² PJM Comments, Docket No. AD18-7-000 at 4 (filed Mar. 9, 2018).

¹¹³ PJM Letter to Secretary Perry re FES's Request for Emergency Relief under Section 202 of the Federal Power Act at 1 (Mar. 30, 2018).

¹¹⁴ See American Manufacturers' Comments at 31-32 and n. 67.

¹¹⁵ PJM Interconnection, L.L.C., *PJM's Evolving Resource Mix and System Reliability*, at 4 (Mar. 30, 2017) (internal footnote omitted) ("*PJM Evolving Resource Mix Study*"), available at <http://www.pjm.com/~media/library/reports-notices/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx>.

reactive capability, and fuel assurance may decrease while flexibility and ramping attributes increase.¹¹⁶ To be clear, PJM's study identified areas of future attention, but the study did not suggest a reliability problem of such a magnitude that it needed to be addressed imminently.

3. Energy prices are currently reflecting lower fuel prices.

A fundamental characteristic of PJM's LMP is that it drives short-term market outcomes toward pricing for all energy on the basis of the cost of the marginal unit, which is the least efficient unit, the unit with the most expensive fuel source, or both. In 2008-2009, when natural gas prices were high, customers shouldered the burden with respect to higher energy prices. During that time of record high LMPs, customers raised repeated concern, if not objection, that LMP drove short-term market outcomes toward pricing for all energy on the basis of high-priced natural gas.¹¹⁷ The response then to customer concerns was effectively that "the market was the market," with high prices being only a function of gas prices and nothing can or should be done to ameliorate high LMPs. With the shale gas revolution and abundant natural gas and low fuel prices, LMPs have reached historic lows.

In PJM, the Independent Market Monitor has recognized that LMPs are low but that LMPs are not too low.¹¹⁸ PJM energy prices track closely with fuel prices and indicate an efficiently functioning market.¹¹⁹ Energy markets and capacity markets work together to allow resources an opportunity to recover their costs. In a time of low energy prices, it should not be surprising that the capacity market needs to do more "heavy lifting" to support ISO/RTO resource adequacy and reliability imperatives and return the "missing money" that was often cited as the initial need for

¹¹⁶ *PJM Evolving Resource Mix Study* at 5.

¹¹⁷ *Id.* at 15 ("The majority of short run marginal costs for power production are fuel costs.").

¹¹⁸ Testimony of Joseph Bowring Before the House Committee on Energy & Commerce, Subcommittee on Energy, State of Electricity Markets at 4 (Oct. 5, 2017), *available at* <http://docs.house.gov/meetings/IF/IF03/20171005/106470/HHRG-115-IF03-Wstate-BowringJ-20171005-U3.pdf>.

¹¹⁹ IMM Comments at 15, Docket No. RM18-1-000.

capacity markets. Even with low energy prices, the PJM Independent Market Monitor has found that at least 50 percent of all nuclear units recovered avoidable costs from all markets, including the capacity markets.¹²⁰ Based on the twelve months ending June 2017, at least 75 percent of all nuclear units recovered avoidable costs from all markets.

It also warrants noting that several other initiatives have been implemented recently that may have impacts on LMP in PJM, such as the Capacity Performance requirements, increasing the PJM energy offer price cap, allowing the triggering of transient shortages, and adding new steps to the operating reserve demand curve for shortage pricing. These changes should be given an opportunity to address any perceived concerns that may still linger. For example, on September 21, 2017, as reserve margins reduced and began to approach reserve requirements, PJM real-time LMP and reserve prices rose significantly due to the recently implemented changes to the shortage pricing operating reserve demand curves. On this day, between 2:00 p.m. and 5:00 p.m., more than half of the pricing for this period was impacted by a market change that triggers shortage pricing as reserves *approach* a reserve requirement rather than trigger shortage pricing only after reserve requirements have been violated.¹²¹ This change to shortage pricing was implemented on July 12, 2017.

4. Confidence in markets is tested when changes to energy market price formation can be viewed as a thinly veiled effort to provide price support for certain classes of resources.

Confidence in markets is tested when changes to energy market price formation can be viewed as a thinly veiled effort to provide price support for certain classes of resources or certain market participants. Industrials advocated for restructuring over twenty years ago to allow the

¹²⁰ *Id.* at 18.

¹²¹ See PJM Interconnection, L.L.C., *Real-time Market Results* at 6 (Sept. 21, 2017), available at <http://www.pjm.com/-/media/committees-groups/committees/oc/20171010/20171010-item-19-real-time-market-results.ashx>.

market to discipline such market entry and exit; it is a fine line between adjusting market rules and engineering preferred pricing outcomes. Coal-fired units with an average age of 49 years old comprise the majority of capacity that is at risk of retirement.¹²² It is reasonable to query how long these assets should reasonably be expected to be operational. Without substantial evidence of reliability problems with the current time-tested approach to energy price formation, FES's Request can reasonably be viewed as a reckless attempt to engineer preferred pricing outcomes to support certain legacy units.

Low natural gas prices may have an adverse impact on certain PJM market participants but, as a general matter, the shale gas revolution should be viewed as a remarkably beneficial opportunity for this region to establish a competitive advantage for businesses. If the market was not allowed to develop during the first decade of the 2000s during a time of high natural gas prices, the shale gas revolution, shale finds, and associated technologies (all leading to today's lower natural gas prices) may not have robustly developed. Unilaterally modifying energy price formation to benefit certain legacy units will increase, to some unknown degree, costs to customers, including businesses that evaluate energy costs as a component of whether to site or expand business in a particular region. Low energy prices send a signal that resources may be uneconomic and should retire—that is an efficient market result. Choosing certain higher cost generation technologies and not letting the market function could chill future investments in alternative energy technology and other resources.

5. Unit inflexibility should not be used as an excuse to inflate energy prices.

To the extent price formation is an issue that warrants attention, many fundamental issues must be considered before the bedrock of PJM's energy markets is upset. FES's characterization

¹²² IMM Comments at 19-20, Docket No. RM18-1-000.

of the facts in its Request implies that certain inflexible resources are being required to operate at a loss. That is simply not the case. Inflexible coal or nuclear units serving load may operate at a loss during a particular hour, but PJM makes a unit that is dispatched whole over an entire day period; losses in some hours are netted with profits in other hours.

In a nutshell, if the generation units were flexible, the units would be backed down or shut down when they became uneconomic to run. An approach that allows these inflexible resources to set prices does not comport with economic logic or the fundamentals of LMP. Simply put, inflexible units may operate and serve load, but, if the inflexible units were to retire, other presumably flexible units would replace them. Such is the reality of using markets to discipline market entry and exit.

6. Adoption of changes to energy pricing rules would severely disrupt contracting for retail supply.

Given the heavily regulated nature of PJM's energy market, a common feature of industry-standard agreements for wholesale transactions and for service to retail customers is a "change in law" provision or "regulatory change" clause.¹²³ Such provisions authorize suppliers to pass along additional costs caused by a change in law or regulatory change to their customers currently under contract. As the Department considers FES's call to override the fundamentals of LMP in PJM, the Department should be cognizant of the ripple effects of such an action on contracts across the industry, including potentially default service agreements and retail agreements.

While ISO/RTO markets across the country have experienced numerous rule changes, the LMP price-setting fundamentals in PJM have been virtually unchanged. Where LMP mechanics have changed in other markets, such changes have occurred after significant stakeholder processes

¹²³ See Energy Research Council, *Are fixed-price electricity supply contracts really fixed?* (2013), available at <http://energyresearchcouncil.com/Are-fixed-price-electricity-supply-contracts-really-fixed.html> ("Many supplier contracts have "pass-through" or "change-in-law" provisions, which can affect a customer's electricity bill.") (website sponsored by, among others, Constellation, an affiliate of Exelon).

that included market simulations that previewed the resulting pricing under the new regime.¹²⁴ This provided ample time for operational analysis to be performed and market participants to understand the implications of the change.

Such a significant change as FES proposes, especially without appropriate time to understand the potential market implications, adds to uncertainty and may lead some market participants to re-open existing contracts using the industry-standard “change in law” or “regulatory change” provisions.

In this context, some suppliers may argue that the higher prices produced by the change in law or regulatory change are costs that should be shifted to their counterparties. For retail energy contracts and default service agreements, quantifying the impact of a change in law or regulatory change of this magnitude and complexity would be speculative and costly. Customers would have little information or leverage to dispute the amount of additional costs their suppliers will require them to pay to avoid default.

This Request should not become a vehicle to short-circuit price formation changes. Certainly, the record does not support a finding that existing price formation is unjust and unreasonable. The Federal Power Act requires more evidentiary support before significant costs are put upon customers to the benefit of the owners of nuclear and coal-fired generation.¹²⁵

¹²⁴ . For example, MISO began its discussions of extended LMP, which PJM referenced in its Comments, in at least 2010, if not before. MISO submitted proposed tariff revisions to implement extended LMP (Initial ELMP Filing) in December 22, 2011, in Docket No. ER12-668-000, which were conditionally approved on July 20, 2012. Extended LMP was not implemented until March 1, 2015. A status report was filed in ER12-668 on August 29, 2016.

¹²⁵ *Id.* at 35.

G. FES Seeks to Undermine the Commission's Recent Order Rejecting the Grid Resiliency Pricing Proposal and the Ongoing FERC Grid Resilience Proceeding and Stakeholder Processes.

1. FES failed to request rehearing of the Commission's January 8 Order rejecting the Grid Resiliency Pricing proposal.

On January 8, 2018, the Commission terminated the proposed resiliency rule focused on providing out-of-market compensation to generators with on-site fuel capability and instead instituted a proceeding in AD18-700 seeking comments and responses on resilience to enable the Commission to holistically examine the resilience of the bulk power system.¹²⁶ In that Order, the Commission rejected the same types of arguments and rationale that FES advances in its Emergency Order Request. FES failed to seek reconsideration of the Commission's January 8 Order rejecting the Grid Resiliency Pricing proposal. Now, FES seeks to advance the same types of arguments and rationale that the Commission has already rejected. DOE must reject FES's forum-shopping and abuse of process and agency resources. FES had the opportunity to ask for reconsideration it seeks now before DOE, but declined to request rehearing at FERC on its January 8 Order rejecting the Grid Resiliency Pricing proposal. Now, without any reference to changed circumstances, FES seeks to re-litigate the same issues at DOE. In doing so, FES provides little evidentiary support of its own and fails to confront the large body of record evidence amassed at FERC in RM18-1-000 from industry, experts, RTOs and ISOs, states, and other stakeholders demonstrating that the relief FES requests is unnecessary and unrelated to reliability or resilience and would result in unjust, unreasonable, and unduly discriminatory or preferential rates.

¹²⁶ Grid Resilience in Regional Transmission Organizations and Independent System Operators, 162 FERC ¶ 61,012 (Jan. 8, 2018).

2. The Commission's Resilience Docket and PJM's ongoing stakeholder processes are more appropriate forums to address FES's concerns.

The Commission is currently evaluating grid resilience issues in RTOs/ISOs and potential recommendations and reforms.¹²⁷ FES complains that the Commission's ongoing docket on resilience is "too little, too late."¹²⁸ However, FERC's ongoing proceeding is precisely the forum to thoroughly address and evaluate—free from a hyperbolic expression of emergency¹²⁹—the complex and multi-layered legal and technical issues surrounding resilience. FERC is also the more appropriate forum to address the longer-term generation resource issues regarding FES's concerns that a substantial portion of the generation fleet will be retiring over a number of years. Although FERC found no urgent threat to the grid's reliability to justify the extraordinary action proposed again now, it did initiate an administrative proceeding to better define and understand resilience and determine whether additional steps are needed to ensure resilience. FirstEnergy attempts to side-step and undermine that proceeding with its Emergency Order Request to DOE.

3. FES's Emergency Order Request proceeding should not be used to short-circuit or circumvent any stakeholder and FERC processes that are currently investigating and evaluating price formation changes.

FES's Request seeks to short-circuit or circumvent any stakeholder process that is underway to consider any need for price formation changes. Price formation issues require lengthy stakeholder discussion and debate. For example, MISO stakeholders considered Extended LMP

¹²⁷ See Grid Resilience in Regional Transmission Organizations and Independent System Operators, 162 FERC ¶ 61,012 (2018) (terminating DOE's proposed rule focused on providing out-of-market compensation to generators with on-site fuel capability and instituting proceeding in AD18-700 seeking comments and responses on resilience to enable the Commission to holistically examine the resilience of the bulk power system).

¹²⁸ Request at 10.

¹²⁹ See Request at 33 ("The time for talk is over. We find ourselves at a crisis point...").

for at least five years before it was implemented in March 2015.¹³⁰ Furthermore, FERC will continue to investigate energy price formation as it impacts resiliency and baseload generation.¹³¹

PJM had issued its Whitepaper on Energy Price Formation on June 15, 2017.¹³² PJM proposed enhancements to energy price formation on November 15, 2017.¹³³ On December 21, 2017, the Commission instituted a Federal Power Act Section 206 paper proceeding to investigate PJM's practices regarding the prices of fast-start resources.¹³⁴ In the PJM stakeholder process, the Energy Price Formation Senior Task Force is evaluating proposals to enhance energy market pricing to ensure "prices accurately reflect the true incremental cost of serving load and minimize the need to recover those costs through out-of-market uplift payments."¹³⁵ The task force recently posted an updated Issue Charge¹³⁶ and Problem Statement.¹³⁷

The PJM stakeholder process on energy price formation issues is ongoing and underway. PJM should be allowed to complete a meaningful stakeholder process "to explore ideas, to discuss options, and to allow all PJM stakeholders an opportunity to represent their interests."¹³⁸ In

¹³⁰ See Midcontinent Independent System Operator, Inc., *ELMP Parallel Operational Analysis* (June 2014), available at <https://cdn.misoenergy.org/20140603%20MSC%20Item%2005e%20ELMP%20Parallel%20Operation%20Analysis%2073949.pdf>.

¹³¹ See generally FERC Dockets RM18-1-000 and AD18-7.

¹³² See PJM Interconnection, L.L.C., *Energy Price Formation and Valuing Flexibility* (June 15, 2017), available at <http://www.pjm.com/~media/library/reports-notices/special-reports/20170615-energy-market-price-formation.ashx>.

¹³³ See <http://www.pjm.com/~media/library/reports-notices/special-reports/20171115-proposed-enhancements-to-energy-price-formation.ashx> (PJM Proposed Enhancements to Energy Price Formation, Nov. 15, 2017).

¹³⁴ *PJM Interconnection, L.L.C.*, Order Instituting Section 206 Proceeding and Commencing Paper Hearing Procedures and Establishing Refund Effective Date, 161 FERC ¶ 61,295 (Dec. 21, 2017); see generally FERC Docket No. EL18-34-000.

¹³⁵ Energy Price Formation Senior Task Force, <http://www.pjm.com/committees-and-groups/task-forces/epfstf.aspx> (last accessed Apr. 4, 2018).

¹³⁶ Energy Price Formation Issue Charge, <http://www.pjm.com/~media/committees-groups/task-forces/epfstf/postings/energy-price-formation-issue-charge.ashx?la=en> (last accessed Apr. 4, 2018).

¹³⁷ Energy Price Formation Problem / Opportunity Statement, <http://www.pjm.com/~media/committees-groups/task-forces/epfstf/postings/energy-price-formation-problem-statement.ashx?la=en> (last accessed Apr. 4, 2018).

¹³⁸ IMM Comments, RM18-1-00, at 35.

addition to the options identified by PJM in its Price Formation Whitepaper, other options for addressing measurable and verifiable reliability or resilience concerns exist. The Commission must provide adequate latitude and discretion to the stakeholder process to allow all reasonable options to be considered, including those options offered in the Independent Market Monitor's Comments in the grid resilience docket.¹³⁹

FES has failed to provide any evidentiary foundation supporting a finding that existing price formation is unjust and unreasonable. The Federal Power Act requires more stakeholder vetting and evaluation before significant costs are put upon customers to the benefit of the owners of nuclear and coal-fired generation.

H. FES's Clearing of the BRA Through the 2020/2021 Delivery Year Demonstrates that FES Currently Has an Obligation, and Associated Compensation For that Obligation, to Run Its Units Through May 31, 2021.

In successfully clearing the BRA through the 2020-21 delivery year, FES willingly took on an obligation, and the associated compensation for that obligation, for that time period. FES's units are committed through that time frame. Despite making these economic decisions, FES now seeks a bailout.

It should be noted that there were many years in which nuclear and coal units generated substantial returns. At the time, industrial entities were deeply concerned about locational-marginal pricing. Meanwhile, utilities such as FirstEnergy were receiving stranded cost payments based on these low numbers.

If the Secretary were to grant FES's Request, customers would be placed in the untenable position of being responsible for the *higher* of cost- or market-based rates. When LMP prices are higher, driven by higher fuel costs, customers have been compelled to pay such market-based

¹³⁹ IMM Comments, RM18-1-00, at 42-45.

prices. Now, driven by lower cost prices, the Request would lead customers to guarantee cost recovery for certain types of generation, including legacy units, in contravention of fundamental and long-standing tenets of FERC ratemaking.¹⁴⁰ Under this approach, customers cannot reasonably view their rates to be “just and reasonable.”

Plainly stated, energy-intensive businesses and other consumers that depend on reliable and reasonably priced energy to produce products and provide services would be required to provide an apparent long-term bailout to certain market participants. Such a bailout cannot be justified on reliability grounds.¹⁴¹ The Request asks to break contracts and seeks unprecedented executive authority to impose new cost structures without due process. If such an Emergency Order were issued, the incredible progress of a market-oriented approach for electric regulation would be heedlessly damaged at the stroke of a pen.

¹⁴⁰ See *Federal Power Comm’n v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944).

¹⁴¹ See, e.g., PJM Interconnection, L.L.C., *PJM’s Evolving Resource Mix and System Reliability*, at 3, 5, 6, and 8 (Mar. 30, 2017), available at <http://pjm.com/-/media/library/reports-notice/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx?la=en>.

II. CONCLUSION

For the reasons set forth above, the PJM Consumer Representatives respectfully request that the Department deny FES's Request for an Emergency Order.

Respectfully submitted,

McNEES WALLACE & NURICK LLC

/s/ Robert A. Weishaar, Jr.

By _____

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Counsel to the PJM Industrial Customer Coalition
and on behalf of the PJM Consumer
Representatives

Dated: April 5, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have this day served, via first-class mail, electronic transmission, or hand-delivery the foregoing upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, DC this 5th day of April, 2018.

/s/ Robert A. Weishaar, Jr.

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April 6, 2018

VIA ELECTRONIC MAIL

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RE: Comments of the New Jersey Board of Public Utilities

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Please accept this letter and attached Comments of the New Jersey Board of Public Utilities ("NJBPU") concerning FirstEnergy Solutions Corp.'s ("FES") Request for Emergency Action under Section 202(c) of the Federal Power Act.



Respectfully submitted,

GURBIR S. GREWAL
ATTORNEY GENERAL OF NEW JERSEY

By: *Timothy R. Oberleiton*
Timothy R. Oberleiton
Deputy Attorney General

cc: Service List (w/encl., by electronic mail)

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

**Request for Emergency Order Pursuant)
To Federal Power Act Section 202(c) By)
FirstEnergy Solutions Corp.)**

DOE Docket No. _____

**COMMENTS OF THE
NEW JERSEY BOARD OF PUBLIC UTILITIES**

Pursuant to Rule 211 of the Federal Energy Regulatory Commission's ("FERC's") Rules of Practice and Procedure,¹ 18 C.F.R. § 385.211, the New Jersey Board of Public Utilities ("NJBP") hereby protests First Energy Solutions Corp.'s ("FES") March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act ("FPA") section 202(c), 16 U.S.C. § 824a(c), pending with the Department of Energy ("Department").

COMMENTS

On September 28, 2017, the Secretary of Energy issued a letter with a Notice of Proposed Rulemaking ("Proposed Rule") for final action by the FERC.² The Proposed Rule directed the FERC to consider requiring certain Regional Transmission Organizations ("RTOs") and Independent System Operators ("ISOs") to establish a tariff mechanism providing for: (1) the purchase of energy from an eligible "reliability and resilience resource" and (2) the recovery of costs and a return on equity for such

¹ Guidance published on the Department's website points to the use of Federal Energy Regulatory Commission ("FERC") Rules where Department regulations at 10 C.F.R. § 205.370, *et. seq.*, are silent. *See, e.g.*, Department Answer to Procedural Questions Concerning Rehearing of Department Order, District of Columbia Public Service Commission, at 2 Docket No. EO-05-01 (December 30, 2005). Order No. Order No. 202-05-3.

² *See* Letter from the Secretary of Energy and Proposal for a NOPR dated September 28, 2017, at 1, Docket No. RM18-1 (filed September 29, 2018) (hereinafter "September 28 Letter").

resources (i.e., a “resilience rate”).³ For support, among other things, the Proposed Rule cited the retirements of baseload generation, particularly coal and nuclear resources, and “a growing recognition that organized markets do not compensate resources for all of the attributes they contribute to the grid, including resilience.”⁴ FERC initiated Docket No. RM18-1 for the purpose of considering and taking final action on the Proposed Rule.⁵ Numerous comments were provided from a wide variety of stakeholders, ranging from utilities, generators, federal and state legislators, state regulatory commissions, state attorneys general, industrial customers, environmental organizations, consumer advocates, mining companies, other industries and individuals.⁶

NJBPU was among the commenters in Docket No. RM18-1. In its comments, NJBPU stated its long-held position that FERC and the RTOs have a vital role in ensuring that a diverse mix of resources contributes to the reliability and resiliency of the electric power grid.⁷ During restructuring, the NJBPU cautioned that price should not be the only consideration.⁸ The NJBPU recognized that the shift to competitive markets may lower bills for ratepayers at a greater long-term impact to the State of New Jersey.⁹ NJBPU urged early action at a federal or regional level to address its concerns that the

³ *Grid Reliability and Resiliency Pricing*, 162 FERC ¶ 61012 at P 2 (Jan. 8, 2018).

⁴ *Id.* at P 3.

⁵ *Id.* at P 1.

⁶ *Id.* at P 5.

⁷ *Comments of the New Jersey Board of Public Utilities*, at 1, 3, Docket No. RM18-1 (Oct. 23, 2017) (*citing Comments of NJBPU and NJDEP*, at 9 Docket Nos. RM95-8, RM94-7-001 (Jan. 30, 1996)).

⁸ *Restructuring the Electric Power Industry in New Jersey, Findings and Recommendations, Final Report*, Docket No. EX94120585Y at 127-128 (April 30, 1997) (“NJBPU Final Report on Restructuring”) available at <https://dSPACE.njstatelib.org/xmlui/bitstream/handle/10929/41482/p9761997b.pdf?sequence=1&isAllowed=y>. This Final Report was presented to Governor Christie Todd Whitman and the State Legislature to inform the development of legislation that would ultimately result in restructuring the utility industry in New Jersey.

⁹ NJBPU Final Report on Restructuring at 127.

market would shift toward overreliance on certain resources.¹⁰ Where no action was taken at the federal or regional level, NJBPU preserved the right to take action at the State level to ensure the State continued to benefit from a diverse portfolio of resources.¹¹ In response to the Proposed Rule, the NJBPU supported the concept of thoughtful and reasoned federal or regional efforts, rather than hastily-implemented solutions yielding substantial uncertainty and significant cost increases for ratepayers.¹²

By Order issued January 8, 2018, the FERC terminated the rulemaking proceeding and initiated a new proceeding to specifically evaluate the resilience of the bulk power system.¹³ The FERC determined that, “[w]hile some commenters allege grid resilience or reliability issues [exist] due to potential retirements of particular resources, we find that these assertions do not demonstrate the unjustness or unreasonableness of the existing RTO/ISO tariffs. In addition, the extensive comments submitted by the RTOs/ISOs do not point to any past or planned generator retirements that may be a threat to grid resilience.”¹⁴ Nevertheless, the FERC initiated a new proceeding, Docket No. AD18-7-000, to holistically examine the resilience of the bulk power system. In doing so, the FERC recognized that “it must remain vigilant with respect to resilience

¹⁰ *Comments of NJBPU and NJDEP*, at 10, Docket Nos. RM95-8, RM94-7-001 (Jan. 30, 1996); *In the Matter of the Energy Master Plan Phase II Proceeding to Investigate the Future Structure of the Electric Power Industry, Order Adopting and Releasing Final Report*, at 15-16, Docket No. EX94120585Y (April 30, 1997) (“NJBPU Order Adopting Final Report”). This document is the NJBPU’s Order adopting recommendations regarding restructuring in the State of New Jersey.

¹¹ *NJBPU Order Adopting Final Report*, *supra*, at 16; During restructuring, no regional or federal action addressed the State’s concerns, which left the State of New Jersey to adopt its own standards. See generally Electric Discount and Energy Competition Act of 1999, N.J.S.A. 48:3-49, *et seq.* (incorporating Renewable Portfolio Standards, Environmental Disclosure Requirements, *etc.*); see N.J.S.A. 48:3-50(a)(7) (stating that it is the policy of New Jersey to “[p]rovide diversity in the supply of electric power throughout this State.”).

¹² *Comments of the New Jersey Board of Public Utilities*, at 3-4, FERC Docket No. RM18-1 (Oct. 23, 2017).

¹³ 162 FERC ¶ 61,012 (Jan. 8, 2018).

¹⁴ 162 FERC ¶ 61,012, at P 15 (internal citations omitted).

challenges, because affordable and reliable electricity is vital to the country's economic and national security.”¹⁵

The Department accepted FERC's decision. In a public statement, in response to the FERC decision, Secretary Perry stated that he “look[s] forward to continuing to work with the Commissioners to ensure the integrity of the electric grid.”¹⁶ A spokeswoman for the Department responded to the FERC decision to initiate a new proceeding with the following quote: “The Secretary is pleased that FERC heard his call and is directing the regional transmission organizations and independent system operators to take steps to continue to address these important issues.”¹⁷ Ultimately, the Department stated that it “plans to work with FERC and all other relevant stakeholders including the RTOs and ISOs as they discuss how best to address the important issue of the long term reliability and affordability of energy in this country.”¹⁸

FES also accepted FERC's decision when it did not seek rehearing of FERC's Order. However, FES now improperly advances to the Department the same types of arguments and rationale that the FERC rejected. Rehearing was the appropriate course, under the FPA, for FES to seek the relief advanced in its Emergency Request. The Emergency Request should be rejected as an inappropriate attempt at rehearing the issue beyond the statutory timeframe; re-litigation of an issue that has been addressed by the FERC and accepted by the Department.

¹⁵ News Release, “FERC Initiates New Proceeding on Grid Resilience, Terminates DOE NOPR Proceeding” (Jan. 8, 2018), *available at* <https://www.ferc.gov/media/news-releases/2018/2018-1/01-08-18.asp#.WsT66C7waUk>

¹⁶ News Release, “Department of Energy Responds to FERC Decision on Proposed Rule” (Jan. 8, 2018), *available at* <https://www.energy.gov/articles/department-energy-responds-ferc-decision-proposed-rule>

¹⁷ *Id.*

¹⁸ *Id.*

Notwithstanding the Department's support for FERC's new proceeding on resiliency, FES criticizes the docket on resilience as "too little, too late."¹⁹ NJBPU respectfully disagrees. Although FERC did not find an urgent reliability threat sufficient to justify the Proposed Rule (and, by extension, the FES Emergency Request), it did initiate an administrative proceeding to better define and understand resilience and determine whether additional steps are needed to ensure resilience. FERC's ongoing proceeding is the appropriate forum to reasonably, thoughtfully, and thoroughly evaluate at a federal and regional level the many complex issues related to resiliency. The Department indicated its pleasure with this response and stated that it planned to work with FERC in this process.²⁰ FES would have the Department renege those public statements and undermine the FERC proceeding by Emergency Order. NJBPU urges the Department to continue on its chosen course and reject the FES Emergency Request.

Moreover, the Department should not countenance the FES attempt to circumvent the on-going price formation stakeholder processes. PJM should be allowed to complete a meaningful stakeholder process "to explore ideas, to discuss options, and to allow all PJM stakeholders an opportunity to represent their interests."²¹ The NJBPU supports such stakeholder vetting and evaluation before significant costs are put upon ratepayers.

The FES Request is further flawed in that it is overbroad and contrary to precedent. On this point, the NJBPU supports and shares the opinion of the PJM

¹⁹ FES Request, *supra*, at 10.

²⁰ News Release, "Department of Energy Responds to FERC Decision on Proposed Rule" (Jan. 8, 2018), *available at* <https://www.energy.gov/articles/departments-energy-responds-ferc-decision-proposed-rule>

²¹ Comments of the Independent Market Monitor for PJM, at 35, Docket No. RM18-1 (October 10, 2017).

Consumer Representatives.²² In Section B.1, the PJM Consumer Representatives explain, with examples, how the FES Emergency Request is inconsistent with the Department's prior Emergency Orders. In section B.2, the PJM Consumer Representatives explain, with ample citations to the Department's own regulations, how the FES Emergency Request improperly seeks to vest the Department with ratemaking authority. That authority properly resides with FERC. NJBPU shares and supports these concerns and urges the Department to give these concerns due consideration.

Finally, NJBPU shares the concern that the FES Emergency Request extends beyond the limited scope of Section 202(c) of the FPA. On this point, the NJBPU supports and shares the opinion of the PJM Consumer Representatives as expressed in Sections A of their Protest.²³ The Department has never exercised Section 202(c) authority where the threat is several years away. In clearing the Base Residual Auction ("BRA") through the 2020-21 delivery year, FES willingly took on an obligation – and the associated compensation for that obligation – for that time period. And, as PJM notes in its Comments, FES' units are committed through that time frame.²⁴

Ultimately, the NJBPU has long held the belief that there may be a problem with price formation such that certain positive attributes are not recognized. NJBPU first expressed concerns and sought a federal or regional solution during restructuring. NJBPU repeated those concerns in its comments in the DOE NOPR.²⁵ However, the NJBPU cautioned against a hastily-implemented solution that may cause more harm than

²² Protest of the PJM Consumer Representatives to the Emergency Order Request of FirstEnergy Solutions Corp., Sections B.1 and B.2 at 9-15, DOE Docket No. ____ (April 5, 2018).

²³ *Id.* at Section A at 4-9.

²⁴ Response of PJM Interconnection, LLC, at 1, DOE Docket No. ____ (March 30, 2018).

²⁵ Comments of the New Jersey Board of Public Utilities, at 4, Docket No. RM18-1 (October 23, 2017).

good.²⁶ The FES Emergency Request appears to be an effort to obtain just such a hasty, and potentially costly, solution. Thus, the NJBPU asks that the Department reject the Emergency Request and urges continued, reasoned, and thoughtful analysis of resilience concerns in the existing dockets and stakeholder forums.

CONCLUSION

NJBPU respectfully asks that the Department give full consideration of these comments.

Respectfully submitted,

**NEW JERSEY BOARD OF PUBLIC
UTILITIES**

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DATED: April 6, 2018

²⁶ *Id.*

CERTIFICATE OF SERVICE

I hereby certify that I have on this 6th day April, 2018, served via electronic transmission, the foregoing upon each person designated on the official service list²⁷ compiled by the Secretary in this proceeding.

/s/ Timothy R. Oberleiton
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New Jersey Office of the Attorney General
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DATED: April 6, 2018

²⁷ While our office is not aware of an “official” DOE service list in this matter, we have created a list comprising the interested parties known at this time.

Johnsen, Steven (MA)

From: Giannetti, Gillian <ggiannetti@nrdc.org>
Sent: Friday, April 06, 2018 5:35 PM
To: Secretary Perry; Walker, Bruce; Jereza, Catherine
Cc: Kennedy, Kit; Chen, Jennifer; mpanfil@edf.org
Subject: Motion to Intervene: FirstEnergy Section 202(c) Request -- EDF, NRDC, and SFP
Attachments: Motion to Intervene of EDF, NRDC, and SFP 04062018.pdf

Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Please find the attached Motion to Intervene of Environmental Defense Fund, Natural Resources Defense Council, and Sustainable FERC Project in FirstEnergy's emergency request pursuant to Section 202(c) of the Federal Power Act.

Thank you and have a lovely weekend,

Gillian R. Giannetti

--

GILLIAN R. GIANNETTI, ESQ.
Staff Attorney

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18 APR 9 AM 8:26

**UNITED STATES OF AMERICA
BEFORE THE DEPARTMENT OF ENERGY**

Request for Emergency Order Pursuant)
To Federal Power Act Section 202(c) By)
FirstEnergy Solutions Corp.) DOE Docket No. _____

**MOTION TO INTERVENE AND PROTEST OF ENVIRONMENTAL DEFENSE FUND,
NATURAL RESOURCES DEFENSE COUNCIL, AND THE SUSTAINABLE FERC PROJECT**

Pursuant to Rules 211 and 214 of the Federal Energy Regulatory Commission's ("FERC") Rules of Practice and Procedure,¹ Environmental Defense Fund ("EDF"), Natural Resources Defense Council ("NRDC"), and Sustainable FERC Project ("SFP") move to intervene in the above-captioned matter.

I. BACKGROUND

On March 28, 2018, FirstEnergy Solutions Corp. ("FES") announced its plans to retire three nuclear generation facilities in 2020 or 2021.² The following day, FES filed a request for an emergency order with the United States Department of Energy ("DOE")³ under Section 202(c) of the Federal Power Act.⁴ FES requested that all merchant coal and nuclear generating units within PJM Interconnection ("PJM") with at least 25 days of onsite fuel be provided non-market, cost-of-service rates and guaranteed profits for at least four years (the "Profit Guarantee Request"). On March 30, 2018, EDF and NRDC filed a letter with DOE urging DOE to reject FES's Profit Guarantee Request.⁵

II. SERVICE OF DOCUMENTS

EDF, NRDC, and SFP designate the following persons to receive service and all communications on their behalf regarding this proceeding:

¹ 18 C.F.R. §§ 385.211 and 385.214.

² News Release, FirstEnergy Solutions Files Deactivation Notice for Three Competitive Nuclear Generating Plants in Ohio and Pennsylvania, PR NEWswire (Mar. 28, 2018, 17:06 ET), <https://www.prnewswire.com/news-releases/firstenergy-solutions-files-deactivation-notice-for-three-competitive-nuclear-generating-plants-in-ohio-and-pennsylvania-300621346.html>; Letter from FES to the Honorable James Richard Perry (Mar. 29, 2018), at 8, 20 (hereinafter "Profit Guarantee Request").

³ See generally Profit Guarantee Request.

⁴ 16 U.S.C. § 824a(c)(1).

⁵ Letter from EDF and NRDC to the Honorable Rick Perry, Assistant Secretary Bruce Walker, and Deputy Assistant Secretary Catherine Jereza (Mar. 30, 2018).

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III. MOTION TO INTERVENE

EDF, NRDC, and SFP move to intervene in the above-captioned matter because this proceeding will directly impact the core missions of EDF, NRDC, SFP, and their members. Specifically, EDF is a national non-profit membership organization engaged in linking science, economics, and law to create innovative, equitable, and cost-effective solutions to society's most urgent environmental problems. With over 2 million members and engaged participants nationwide, including within PJM, EDF has been an active environmental and energy advocate since 1967. NRDC is a national non-profit membership organization with more than 3 million members and engaged community participants, including within PJM. NRDC is committed to the preservation and protection of the environment, public health, and natural resources. To this end, NRDC is actively involved in advancing cost-effective environmental solutions that reduce greenhouse gas emissions and other dangerous forms of air pollution and accelerate the deployment of energy efficiency and renewable energy. EDF and NRDC regularly engage on issues relating to reliability, resilience, and markets for electric energy, capacity, and ancillary services, including through proceedings before FERC, the North American Electric Reliability Corporation ("NERC"), DOE, Regional Transmission Organizations ("RTOs"), and state regulatory authorities,

among others. EDF and NRDC support electric regulatory priorities that provide robust reliability and resilience in a manner that facilitates the integration of clean energy and is affordable to customers.

SFP is an education and advocacy initiative that represents a consortium of national and regional environmental, consumer, and energy policy non-governmental organizations with members throughout the United States, including within PJM. SFP focuses on accelerating the deployment of renewable energy and demand-side resources by advocating cost-effective electric regulatory policies that remove barriers for these resources and ensure more just and reasonable rates. SFP has participated in stakeholder discussions involving resilience and reliability at FERC, DOE, and RTOs, among others.

FES's proposal would undermine the achievement of EDF's, NRDC's, and SFP's core missions. Each organization's membership would be harmed by the monetary, environmental, and public health impacts of the Profit Guarantee Request. EDF, NRDC, and SFP are not now, nor will they be, adequately represented by any other party in these proceedings. Accordingly, under Rule 214, EDF, NRDC, and SFP have a significant and direct interest in this proceeding and the interventions are in the public interest. Thus, EDF, NRDC, and SFP move to intervene under Rule 214.

IV. STATEMENT OF OPPOSITION AND PROTEST

Pursuant to Rule 214(b)(1), EDF, NRDC, and SFP strongly oppose FES's Profit Guarantee Request. The Profit Guarantee Request suffers from already examined and dismissed errors and fundamental deficiencies. Namely, the request: (1) is premised on legal flaws; (2) ignores prior and current FERC activity and finding; (3) would impose enormous cost upon American homes and businesses without benefit; and (4) would undermine the competitive marketplace. EDF and NRDC incorporate by reference the arguments made in their March 30, 2018 letter.⁶ EDF, NRDC, and SFP reserve the right to supplement this pleading to explain, in greater detail, why the Profit Guarantee Request is unlawful and should be rejected.

⁶ *Id.*

V. CONCLUSION

For the foregoing reasons, EDF, NRDC, and SFP respectfully request that DOE grant this Motion to Intervene and make EDF, NRDC, SFP parties in the above-captioned proceeding, with all rights attendant thereto, and that DOE reject FES's Profit Guarantee Request.

Respectfully submitted,

/s/ Michael Panfil

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T 202-717-8350
jchen@nrdc.org
ggiannetti@nrdc.org

CERTIFICATE OF SERVICE

I hereby certify that, to the best of my knowledge, I have this 6th day of April 2018 served the foregoing upon each person designated on the service list compiled by the Secretary in this proceeding.

/s/ Gillian Giannetti
Gillian Giannetti

Rebecca L. Shelton

202 585 6911 direct
rshelton@thompsoncoburn.com

April 6, 2018

VIA U.S. MAIL AND ELECTRONIC MAIL

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585

Mr. Bruce Walker
Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585

Ms. Catherine Jereza
Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585

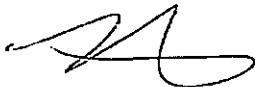
Re: Petition to Intervene of Old Dominion Electric Cooperative

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Enclosed please find the Petition to Intervene of Old Dominion Electric Cooperative in the proceeding concerning FirstEnergy Solutions Corp.'s Request for Emergency Action under Section 202(c) of the Federal Power Act.

Please contact the undersigned if you have any questions concerning this matter.

Respectfully Submitted,



Rebecca L. Shelton
Counsel for Old Dominion Electric Cooperative

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

**Request for Emergency Order Pursuant to) DOE Docket No. ____
Federal Power Act Section 202(c) by)
FirstEnergy Solutions Corp.**

**PETITION TO INTERVENE OF
OLD DOMINION ELECTRIC COOPERATIVE**

I. INTRODUCTION

This proceeding involves a pending request by FirstEnergy Solutions Corp. (“FirstEnergy Solutions”), on behalf of its subsidiaries, under Section 202(c) of the Federal Power Act (“FPA”), 16 U.S.C. § 824a(c) (“Request”). FirstEnergy filed its Request with the Department of Energy (“DOE”) on March 29, 2018, asking that the Secretary of Energy (“Secretary”) “find that an emergency condition exists in the footprint of the PJM Interconnection, L.L.C. (“PJM”) that requires immediate intervention by the Secretary, in the form of a Section 202(c) emergency order . . .” Request at 1. FirstEnergy Solutions has asked that the Secretary direct certain existing nuclear and coal generators to enter into contracts with PJM to provide electric energy, capacity, and ancillary services that FirstEnergy Solutions alleges are “needed to maintain the stability of the electric grid,” and to require PJM to compensate the nuclear and coal units “for the full benefits they provide to energy markets and the public at large.” *Id.*

By this submittal, Old Dominion Electric Cooperative (“ODEC”) hereby petitions to intervene in this proceeding.

II. COMMUNICATIONS

Communications regarding this matter should be addressed to the following persons, who also should be designated for service on the official list for this proceeding:

Adrienne E. Clair
Rebecca L. Shelton
Thompson Coburn LLP
1909 K Street, N.W., Suite 600
Washington, D.C. 20006-1167
(202) 585-6900
(202) 585-6969 (fax)
aclair@thompsoncoburn.com
rshelton@thompsoncoburn.com

III. PETITION TO INTERVENE

ODEC is a not-for-profit power supply electric cooperative, organized and operating under the laws of Virginia and subject to the jurisdiction of the Federal Energy Regulatory Commission. ODEC is a generation-owning utility that supplies capacity and energy to its eleven electric distribution cooperative members, all of which are located within the PJM control area. ODEC is a network transmission customer of PJM, as well as a PJM Transmission Owner. As a Transmission Owner and load-serving entity in the PJM region, ODEC stands to be directly impacted by FirstEnergy Solutions' Section 202(c) request. Therefore, ODEC has a direct interest in this proceeding, and its interest cannot be adequately represented by any other entity.

IV. CONCLUSION

WHEREFORE, for the foregoing reasons, ODEC requests that the DOE grant ODEC's petition to intervene, with all rights attendant thereto.

Respectfully submitted,

/s/ Adrienne E. Clair

Adrienne E. Clair

Rebecca L. Shelton

Thompson Coburn LLP

1909 K Street, N.W., Suite 600

Washington, D.C. 20006-1167

(202) 585-6900

(202) 585-6969 (fax)

aclair@thompsoncoburn.com

rshelton@thompsoncoburn.com

*Attorneys for Old Dominion Electric
Cooperative*

Dated: April 6, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have, on this 6th day of April, 2018, caused a copy of the foregoing document to be served, via electronic mail, upon representatives for FirstEnergy Solutions and other entities that may be directly affected by the Section 202(c) Request.

/s/ Rebecca L. Shelton

Rebecca L. Shelton

Law Offices of:

Thompson Coburn LLP
1909 K Street, N.W., Suite 600
Washington, D.C. 20006-1167
202.585.6900
202.585.6969 (facsimile)

COMMONWEALTH OF PENNSYLVANIA

Document 31



OFFICE OF CONSUMER ADVOCATE

555 Walnut Street, 5th Floor, Forum Place
Harrisburg, Pennsylvania 17101-1923
(717) 783-5048
800-684-6560

FAX (717) 783-7152
consumer@paoca.org

April 6, 2018

Via Electronic Mail

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
the.secretary@hq.doe.gov

Mr. Bruce Walker
Assistant Secretary, DOE Office of Elec. Delivery & Energy Reliability
Office of Electric Reliability and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
bruce.walker@hq.doe.gov

Ms. Catherine Jereza
Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
catherine.jereza@hq.doe.gov

RE: Motion of Pennsylvania Office of Consumer Advocate

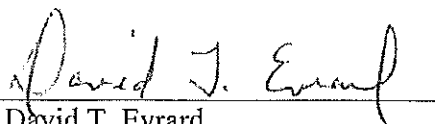
Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Attached is Pennsylvania Office of Consumer Advocate's (PA OCA) Motion to Intervene in the proceeding concerning FirstEnergy Solutions Corp.'s (FES) Request For Emergency Action under Section 202(c) of the Federal Power Act. Under Pennsylvania law, PA OCA is the state agency charged with representing the interests of public utility consumers in matters before state and federal regulatory bodies.

PA OCA is also a member of PJM Interconnection LLC, which will be affected by the FES request. PA OCA opposes the FES Request for emergency action. If the Request is not denied outright, PA OCA requests that interested parties be given 60 days to file comments, as

requested by the Electric Power Supply Association and other organizations on Friday, March 30, 2018.

Respectfully submitted,

A handwritten signature in black ink, reading "David T. Evrard", written over a horizontal line.

David T. Evrard
Assistant Consumer Advocate
Pennsylvania Office of Consumer Advocate

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

Request for Emergency Order Pursuant)
To Federal Power Act Section 202(c) By)
FirstEnergy Solutions Corp.) **DOE Docket No. _____**

**MOTION OF PENNSYLVANIA OFFICE
OF CONSUMER ADVOCATE
TO INTERVENE**

The Pennsylvania Office of Consumer Advocate (PA OCA) hereby moves to intervene in the above-captioned proceeding pursuant to Rules 211 and 214 of the Federal Energy Regulatory Commission's (Commission) Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214.

I. PROCEDURAL BACKGROUND

On March 29, 2018, First Energy Solutions Corp. (FES) issued a letter (Request) to the Honorable James Richard Perry, Secretary of Energy, requesting that the Secretary use emergency authority under Section 202(c) of the Federal Power Act to find that an emergency condition exists in the PJM Interconnection, L.L.C. (PJM) territory requiring immediate intervention. Specifically, FES requests that the Secretary (a) order "certain existing nuclear and coal-fired generators . . . to enter into contracts" with PJM to generate and transmit energy, capacity, and ancillary services to "maintain the stability of the electric grid" and (b) order PJM to "promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide" to energy markets and the public. FES served the Request on over 100

owners of generation, transmission, or distribution assets, state public utility commissions, and others.

II. MOTION TO INTERVENE

PA OCA is the state agency charged, under Pennsylvania law, with representing the interests of public utility consumers in matters before state and federal regulatory bodies. If FES' Request is granted, cost responsibility for payments made pursuant to the Emergency Order may be recovered from consumers in Pennsylvania and throughout the PJM region. PA OCA opposes the Request.

PA OCA moves for intervention under Rule 214 of the Federal Energy Regulatory Commission's (Commission) Rules of Practice and Procedure. Consistent with Rule 214(b)(2), PA OCA has a significant and direct interest in the outcome of this proceeding, and as the agency statutorily charged with representing the interests of public utility customers in Pennsylvania, PA OCA's participation is in the public interest.

III. SERVICE OF DOCUMENTS

The person to receive service and communications on behalf of PA OCA with regard to this proceeding is:

David T. Evrard
Assistant Consumer Advocate
PA Office of Consumer Advocate
555 Walnut Street, 5th Floor
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Email: devrard@paoca.org

IV. STATEMENT OF OPPOSITION

Commission Rule 214(b)(1) requires the movant to state its position on the underlying matter. PA OCA opposes the relief sought by FES. Overwhelming evidence, not cited in the

Request, demonstrates that no need exists for the requested relief and certainly no emergency exists that would justify application of Section 202(c) of the Federal Power Act. PA OCA anticipates joining with other representatives of consumer interests in submitting a comprehensive rebuttal to FES' Request.

PA OCA joins with other intervenors in respectfully requesting the Department to give all interested parties sufficient time to present their responses to the FES Request before ruling on the Request. To that end, PA OCA supports the request filed Friday, March 30, 2018, by the Electric Power Supply Association and other organizations requesting a 60-day comment period.

V. CONCLUSION

For the reasons set forth above, PA OCA respectfully requests that the Department grant PA OCA's motion to intervene in this proceeding and, if the Department does not reject the FES Request outright, provide all interested parties with 60 days to file comments on the Request.

Respectfully submitted,

/s/ David T. Evrard

David T. Evrard
Assistant Consumer Advocate
PA Office of Consumer Advocate
555 Walnut Street, 5th Floor
Harrisburg, PA 17101-1923
Email: devrard@paoca.org

Dated: April 6, 2018

JOE MANCHIN III
WEST VIRGINIA

SUITE 300
HART BUILDING
WASHINGTON, DC 20510
(202) 224-3954

United States Senate

WASHINGTON, DC 20510-4804
April 6, 2018

COMMITTEES
APPROPRIATIONS
ENERGY AND NATURAL RESOURCES
INTELLIGENCE
VETERANS' AFFAIRS

Document 32

President Donald J. Trump
The White House
1600 Pennsylvania Ave, Northwest
Washington, DC 20060

Dear President Trump,

On March 29, 2018, Secretary Perry and the Department of Energy received a request for an emergency order pursuant to his authority under Section 202(c) of the Federal Power Act. It is my understanding that this request by FirstEnergy Solutions is now under consideration. I greatly appreciate Secretary Perry's efforts to secure and strengthen our electric grid and, in particular, his consideration of this request.

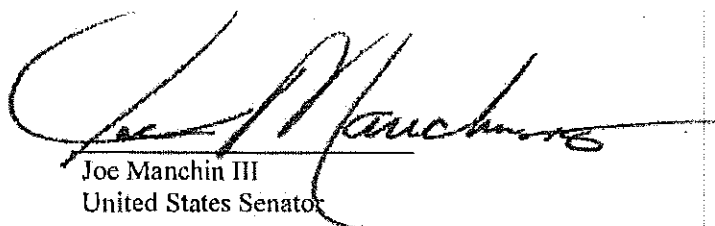
As I have discussed with you and Secretary Perry on numerous occasions, many baseload units in the PJM Interconnection (PJM) footprint continue to suffer from the cumulative effect of an onslaught of overregulation, market rules that disadvantage baseload power, and subsidies and mandates that have encouraged negative bidding into competitive markets. In combination with the naturally occurring dynamics of our energy markets, essential baseload units that provide resilience and reliability attributes to our grid are struggling to stay operational. Many of these plants are located in the Ohio Valley region, including the Pleasants Power Station in Willow Island, West Virginia.

As it has time and again, coal-fired power generation performed well during the Polar Vortex in 2014 and more recently during this year's Bomb Cyclone. These extreme weather events tested our electric grid in an unprecedented manner and coal delivered. In fact, the Department of Energy's own National Energy Technology Lab (NETL) found that, at the height of peak demand on January 5, 2018, "had coal been removed, a 9-18 GW shortfall would have developed."¹ NETL went on to conclude that, "In the case of PJM, it can also be shown that the demand could not have been met without coal."²

The impending deactivation of numerous coal and nuclear power plants is of great concern for our grid, for our communities, and for our nation. In addition to the loss of jobs and threats to the economic livelihood of the communities in which these plants sit, our region and our nation's electric grid will become less resilient if no action is taken now to keep these plants operational.

Therefore, I urge your Administration and the Department of Energy to use its statutory authority to preserve these critical units. I thank you for your consideration and am happy to make myself available to you at any time to discuss these matters.

Sincerely,



Joe Manchin III
United States Senator

Cc: The Honorable Rick Perry

¹ National Energy Technology Lab. Department of Energy. "Reliability, Resilience, and the Oncoming Wave of Retiring Baseload Units, Volume I: The Critical Role of Thermal Units during Extreme Weather Events." Mar 13, 2018. Available at <https://www.netl.doe.gov/research/energy-analysis>. Last accessed April 6, 2018.

² *Id.*

Johnsen, Steven (MA)

From: Ronald O'Connell (b) (6)
Sent: Sunday, April 08, 2018 3:42 PM
To: Secretary Perry; Ronald O'Connell
Subject: Please don't let me down, from a swing voter

Rick

Please consider that (b) (6) and I heard you say that you were going to help drain the swamp. If you approve giving my tax dollars to First Energy for a bad decision they made to get involved with the Perry nuclear power plant, then you are proving to me that you are not in favor of free enterprise. I am the voter that looks at your actions, not your words. I agree with you that too many times phrase like "red meat to your" are used and I wish people would better focus on your actions. However if you give First Energy the bailout then you have failed me.

Ron O'Connell
(b) (6)

18 APR 9 AM 9:26

From: Jereza, Catherine
To: Bittner, Kathy (CONTR)
Cc: Lotto, Adrienne; Cunningham, Sean; Konieczny, Katherine
Subject: FW: Motion to Intervene and Protest of the American Public Power Association Concerning Request of FirstEnergy Solutions Corp. for an Emergency Order under FPA Section 202(c)
Date: Monday, April 09, 2018 6:30:42 PM
Attachments: [image003.png](#)
[APPA Motion to Intervene and Protest Re FES.pdf](#)

From: John McCaffrey [mailto:jmccaffrey@publicpower.org]

Sent: Monday, April 09, 2018 5:21 PM

To: Secretary Perry <The.Secretary@hq.doe.gov>; Walker, Bruce <Bruce.Walker@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>

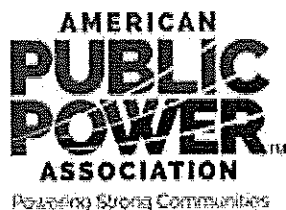
Cc: Delia Patterson <dpatterson@publicpower.org>; Jillian Allen <jallen@publicpower.org>; Elise Caplan <ECaplan@publicpower.org>; Jack Cashin Jr <jcashin@publicpower.org>

Subject: Motion to Intervene and Protest of the American Public Power Association Concerning Request of FirstEnergy Solutions Corp. for an Emergency Order under FPA Section 202(c)

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Attached is the Motion to Intervene and Protest of the American Public Power Association in response to the March 29, 2018 request of FirstEnergy Solutions Corp., on behalf of certain of its subsidiaries, for an emergency order under section 202(c) of the Federal Power Act. If there are any questions or concerns regarding this filing, please contact me at the number or email address listed below.

John E. McCaffrey
Regulatory Counsel
jmccaffrey@publicpower.org
Office: 202.467.2952
Mobile: (b) (6)





2451 Crystal Drive
Suite 1000
Arlington, VA 22202-4804
202-467-2900
www.PublicPower.org

April 9, 2018

Via Electronic Mail

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
the.secretary@hq.doe.gov

Mr. Bruce Walker
Assistant Secretary, DOE Office of Elec. Delivery & Energy Reliability
Office of Electric Reliability and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
bruce.walker@hq.doe.gov

Ms. Catherine Jereza
Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
catherine.jereza@hq.doe.gov

**RE: Motion to Intervene and Protest of the American Public Power Association
Regarding Request of FirstEnergy Solutions Corp. for an Emergency Order**

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Enclosed is the Motion to Intervene and Protest of the American Public Power Association in response to the March 29, 2018 request of FirstEnergy Solutions Corp., on behalf of certain of its subsidiaries, for an emergency order under section 202(c) of the Federal Power Act.

If there are any questions or concerns regarding this filing, please contact me at the number listed above or by email at jmccaffrey@publicpower.org.

Respectfully submitted,

/s/ John E. McCaffrey

John E. McCaffrey
Regulatory Counsel

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

Request for Emergency Order Pursuant)
to Federal Power Act Section 202(c) by) DOE Docket No. _____
FirstEnergy Solutions Corp.)

**MOTION TO INTERVENE AND PROTEST OF
THE AMERICAN PUBLIC POWER ASSOCIATION**

Pursuant to Rules 212, 214, and 211 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“FERC”),¹ the American Public Power Association (“APPA”) hereby moves to intervene in the above-captioned U.S. Department of Energy (“Department”) proceeding and protests the March 29, 2018 request (“Request”) of FirstEnergy Solutions Corp., on behalf of certain of its subsidiaries (collectively, “FirstEnergy”), that the Secretary of Energy (“Secretary”) issue an emergency order under section 202(c) of the Federal Power Act (“FPA”).²

APPA urges the Secretary to deny FirstEnergy’s unjustified request for an emergency order requiring PJM Interconnection, L.L.C. (“PJM”), and, by extension, the electricity consumers in the PJM region, to provide “full cost recovery” for certain merchant generating plants in PJM. FirstEnergy has neither demonstrated the existence of an emergency that would support action by the Secretary under FPA section 202(c), nor shown that its requested relief is reasonable.

¹ 18 C.F.R. §§ 385.212, 385.214, and 385.211 (2017). The Department has pointed to FERC’s procedural rules where the Department’s regulations at 10 C.F.R. § 205.370, *et. seq.*, are silent. *See, e.g.*, DOE Answer to Procedural Questions Concerning Rehearing of DOE Order, *District of Columbia Public Service Commission*, Docket No. E0-05-01 (December 30, 2005) at 2.

² 16 U.S.C. § 824a(c).

I. DESCRIPTION OF FIRSTENERGY'S REQUEST

FirstEnergy claims that an emergency condition exists in the PJM region due to recent and imminent retirements of nuclear and coal-fired generating units.³ According to FirstEnergy, these plant retirements threaten generation diversity, reliability, resilience, and electric security in PJM.⁴ To address this alleged emergency, FirstEnergy asks the Secretary to issue a section 202(c) emergency order: (1) directing certain existing nuclear and coal-fired generators in PJM to enter into contracts with PJM “to generate, deliver, interchange, and transmit electric energy, capacity, and ancillary services to maintain fuel diversity and grid dependability and resiliency within the PJM region;”⁵ and (2) directing PJM to pay these merchant generating units “just and reasonable cost-based rates that provide for full cost recovery consistent with ratemaking standards and principles or as otherwise necessary to ensure continued operations.”⁶ As proposed in the Request, relief would extend to *all* eligible plants in PJM, not just those owned and operated by FirstEnergy.⁷

FirstEnergy asks the Secretary to issue an emergency order immediately.⁸ And “[i]f PJM and the owners are unable to agree to the contractual terms within fifteen (15) days of the issuance of the order,” FirstEnergy requests “that the Secretary step in and determine the just and

³ See Request at 16.

⁴ See *id.* at 22.

⁵ *Id.* at 31.

⁶ *Id.* The Request (at 30) defines eligible plants as follows:

[N]uclear and coal-fired generators located within the PJM footprint that have a supply of fuel on-site sufficient to allow twenty-five (25) days of operation at full output, that are substantially compliant with all applicable federal, state, and local environmental laws and regulations, and that do not recover any of their capital or operating costs through rates regulated by a duly authorized state regulatory authority, municipal government, or energy cooperative.

⁷ *Id.* at 27-28.

⁸ *Id.* at 27.

reasonable compensation and conditions.”⁹ FirstEnergy proposes that the emergency order remain in place for four years, “or until the Secretary determines that the emergency has ceased to exist because the PJM markets have been fixed to properly compensate these units for the resiliency and reliability benefits that they provide, whichever is later.”¹⁰

II. MOTION TO INTERVENE

APPA is the national service organization representing the interests of not-for-profit, state, municipal and other locally owned electric utilities throughout the United States. More than 2,000 public power utilities provide over 15 percent of all kWh sales to ultimate customers and to businesses in every state except Hawaii. APPA utility members’ primary goal is providing customers in the communities they serve with reliable electric power and energy at the lowest reasonable cost, consistent with good environmental stewardship. This orientation aligns the interests of APPA-member electric utilities with the long-term interests of the residents and businesses in their communities. Collectively, public power systems serve over 49 million people.

APPA has utility members within the PJM region that may be directly affected by any action taken by the Secretary on FirstEnergy’s Request. Further, the Secretary’s actions in this matter could potentially have broader implications for the regulation of wholesale electricity markets in the United States, and APPA wishes to intervene to represent the interests of its members on such issues. For these reasons, the participation of APPA in this proceeding is consistent with the public interest, and APPA moves for leave to intervene as a party.

APPA respectfully requests that communications regarding this proceeding be directed to

⁹ *Id.* at 31-32.

¹⁰ *Id.* 32.

the following individuals:

Delia Patterson
Senior Vice President, Advocacy &
Communications and General Counsel
American Public Power Association
2451 Crystal Drive
Suite 1000
Arlington, VA 22202
(202) 467-2900
dpatterson@publicpower.org

John E. McCaffrey
Regulatory Counsel
American Public Power Association
2451 Crystal Drive
Suite 1000
Arlington, VA 22202
(202) 467-2900
jmccaffrey@publicpower.org

III. PROTEST

FirstEnergy has not demonstrated the existence of an emergency within the meaning of FPA section 202(c), and APPA urges the Secretary to deny the Request. The crux of FirstEnergy's claim that an emergency exists is that retiring merchant coal and nuclear plants continue to be necessary for the reliable and resilient operation of the grid in the PJM region, which would otherwise be overly dependent on natural gas-fired plants and other forms of generation that lack fuel security.¹¹ FirstEnergy contends that FERC and PJM have not done enough to prevent coal and nuclear plant retirements,¹² arguing, in particular, that PJM markets do not adequately compensate the reliability and resiliency benefits of traditional baseload units with secure fuel supplies.¹³ FirstEnergy's general claims concerning the potential adverse impacts of coal and nuclear plant retirements in PJM do not establish the existence of an emergency within the meaning of section 202(c), let alone one that would justify imposing cost-of-service payments for merchant plants on consumers in PJM for at least a four-year period.

Section 202(c) provides a narrow and limited mechanism for the Secretary "to require temporary connections of facilities and such generation, delivery, interchange, or transmission of

¹¹ See generally *id.* at 16-24.

¹² See *id.* at 8-12.

¹³ See *id.*

electric energy” during emergencies.¹⁴ Neither section 202(c) nor the Department’s implementing regulations contemplate broad, protracted intervention in wholesale energy markets, and the Secretary’s emergency authority simply cannot be invoked based on claims that plant retirement trends and over-reliance on a particular type of generation may pose reliability challenges some years in the future. The D.C. Circuit has specifically observed that FPA section 202(c) is not a means to secure one particular type of resource during periods of system surplus; rather, the provision “speaks of ‘temporary’ emergencies, epitomized by wartime disturbances, and is aimed at situations in which demand for electricity exceeds supply and not at those in which supply is adequate but a means of fueling its production is in disfavor.”¹⁵ Consistent with this narrow interpretation of the statute, the Department’s regulations specify that “[a]ctions under [FPA section 202(c)] authority are envisioned as meeting a *specific inadequate power supply situation*.”¹⁶

Moreover, FirstEnergy’s claimed “emergency” is, at bottom, based on economics; FirstEnergy contends that merchant coal-fired and nuclear plants in PJM are inadequately compensated for the reliability and resilience benefits they provide.¹⁷ The Department’s regulations specifically state, however, that “[s]ituations where a shortage of electric energy is projected due solely to the failure of parties to agree to terms, conditions *or other economic factors relating to service*, generally will not be considered as emergencies unless the inability to

¹⁴ 16 U.S.C. § 824a(c).

¹⁵ *Richmond Power & Light Co. v. FERC*, 574 F.2d 610, 615 (D.C. Cir. 1978) (footnote omitted).

¹⁶ 10 C.F.R. § 205.371 (emphasis added).

¹⁷ See, e.g., Request at 3 (arguing that “[t]he very diversity of supply that baseload nuclear and coal-fired units provide is being lost more and more each day as more and more of these plants retire because their fuel security and resiliency are not properly recognized and valued by the current administrative market rules.”); see also *id.* at 32 (indicating that the emergency would “cease[] to exist [once] the PJM markets have been fixed to properly compensate these units for the resiliency and reliability benefits that they provide”).

supply electric service is imminent.”¹⁸ FirstEnergy’s Request cites plant retirements that may occur “in the next several years,”¹⁹ which does not demonstrate an “imminent” inability to supply electric service in PJM that could possibly justify characterizing the situation in PJM as an “emergency” within the meaning of FPA section 202(c).²⁰

While FirstEnergy claims that PJM is facing an “impending crisis,”²¹ the evidence cited in the Request does not establish that retirement of coal and nuclear electric generation resources in the PJM region presents an immediate reliability threat justifying sweeping action under FPA section 202(c). In a March 30, 2018 letter to the Secretary responding to FirstEnergy’s Request, PJM “state[d] without reservation [that] there is no immediate threat to system reliability.”²² PJM emphasized that plant retirements in the region are subject to review by PJM, which has “a range of tools available” to address any identified resource adequacy or reliability problems associated with plant retirements, including “offering full cost of service compensation . . . to induce assets to remain temporarily on-line.”²³

Importantly, most of the same arguments FirstEnergy raises in its Request were considered by FERC in response to the Secretary’s proposed grid resiliency pricing rule,²⁴ and FERC found that requiring full cost recovery for fuel-secure merchant generating facilities was

¹⁸ 10 C.F.R. § 205.371 (emphasis added).

¹⁹ Request at 20.

²⁰ In addition to the discussion above, APPA endorses the legal analysis of the PJM Consumer Representatives in this proceeding showing the narrow and limited scope of FPA section 202(c), and its inapplicability to the factual circumstances described by FirstEnergy. See Protest of the PJM Consumer Representatives to the Emergency Order Request of FirstEnergy Solutions Corp. at 4-13 (April 5, 2018).

²¹ Request at 26.

²² PJM Response at 1.

²³ *Id.*

²⁴ *Grid Resiliency Pricing Rule*, 82 Fed. Reg. 46,940 (Oct. 10, 2017).

not justified.²⁵ FERC's January 8 Order on the Secretary's proposed rule noted that FirstEnergy and other commenters "allege[d] grid resilience or reliability issues due to potential retirements of particular resources,"²⁶ but the Commission found "that these assertions do not demonstrate the unjustness or unreasonableness of the existing RTO/ISO tariffs."²⁷ FERC prudently instituted proceedings to further analyze and address the issues raised by the Secretary's proposed rule,²⁸ and those proceedings are ongoing, as FirstEnergy acknowledges.²⁹ FirstEnergy did not seek rehearing of FERC's January 8 Order, and it is inappropriate for FirstEnergy to seek essentially the same relief from the Secretary that FERC, applying its exclusive jurisdiction over the rates, terms, and conditions of wholesale sales of electricity, found to be unjustified.³⁰

Even if the Secretary were inclined to agree that the potential retirement of coal and nuclear plants in PJM is cause for concern, the relief requested by FirstEnergy is not reasonable. FirstEnergy asks the Secretary to require PJM and all eligible merchant generators to enter into full cost-of-service contracts (the cost of which would be passed on to consumers in the PJM region) without any showing that any particular resource is critical to reliability or resilience in

²⁵ See *Grid Reliability and Resilience Pricing*, 162 FERC ¶ 61,012 at PP 14-15 (Jan. 8, 2018) ("January 8 Order").

²⁶ *Id.* at P 15 (footnote omitted).

²⁷ *Id.*

²⁸ *Id.* at PP 17-20.

²⁹ Request at 9-10. One piece of evidence cited by FirstEnergy that was not considered by FERC in its January 8 Order is the recent study by the Department's National Energy Technology Laboratory ("NETL") concerning the performance of coal and nuclear plants during the extreme cold weather in late 2017 and early 2018. See Request at 4. Evidence that coal and nuclear plants currently contribute to resource adequacy and reliability in the PJM region, however, does not establish that the potential retirement of some of these plants creates an emergency situation in PJM. Moreover, the PJM Consumer Representatives and other commenters in this proceeding have questioned the validity and significance of the NETL study's conclusions. See PJM Consumer Representatives Protest at 25-28; March 30, 2018 Letter from Sierra Club at 12-15; March 20, 2018 Letter of Environmental Defense Fund and the Natural Resources Defense Council at 6-7.

³⁰ As the PJM Consumer Representatives note, the Department of Energy Organization Act provides that "[t]he decision of [FERC] involving any function within its jurisdiction . . . shall not be subject to further review by the Secretary or any officer or employee of the Department." 42 U.S.C. § 7172(g).

PJM.³¹ There is also a fundamental disconnect between the alleged problem identified by FirstEnergy and its proposed solution. As noted above, FirstEnergy's "emergency" argument boils down to a claim that coal and nuclear plants in PJM receive inadequate revenues and will retire in large numbers. Yet eligibility for FirstEnergy's proposed emergency relief does not require a showing that a plant is not currently recovering its costs, or that the plant would retire but for the opportunity to execute a long-term, cost-of-service contract with PJM. Further, the PJM Tariff already provides a process for PJM to review the reliability impacts of generator retirements, and PJM has tools to avoid adverse impacts, including offering cost-based compensation to incent plants to stay in service. FirstEnergy also never explains why four years would be an appropriate term for an emergency order to remain in effect. The costs to consumers in the PJM region could be enormous if the Secretary were to implement the requested emergency relief, and FirstEnergy has not shown that its proposed relief is reasonably tailored to addressing the issues that FirstEnergy identifies.³²

APPA wishes to emphasize that it is not dismissing the broader concerns underlying FirstEnergy's Request. APPA agrees that fuel supply diversity enhances system reliability and resilience, and there is no dispute that existing coal and nuclear plants currently make important contributions to resource adequacy in the PJM region. APPA also shares the concern that the organized markets operated by FERC-approved Regional Transmission Organizations ("RTOs") and Independent System Operators ("ISOs") have not proven to be well-suited to addressing fuel

³¹ See Request at 27-28. FirstEnergy never specifies the grounds on which it claims standing to ask for an emergency order applicable to merchant coal and nuclear plants that are not owned by FirstEnergy.

³² APPA also notes that FirstEnergy's request that the Secretary, rather than FERC, determine the just and reasonable compensation for sales from eligible plants if PJM and the plants' owners are unable to agree is directly contrary to the Department's regulations. See 10 C.F.R. 205.376 (2017) (providing that "[i]n the event that the DOE determines that an emergency exists under section 202(c), and the 'entities' are unable to agree on the rates to be charged, the DOE shall prescribe the conditions of service and refer the rate issues to [FERC] for determination by that agency in accordance with its standards and procedures.").

diversity objectives. These are important and complex issues that regulators, policymakers, and industry stakeholders must address, and are currently seeking to address, in FERC's resilience proceeding, in individual RTO/ISO stakeholder processes, in North American Electric Reliability Corporation ("NERC") proceedings, and elsewhere. APPA strongly disputes the notion, however, that drastic intervention in the markets using the Secretary's FPA section 202(c) emergency authority is an appropriate solution to these concerns in the PJM region.

IV. CONCLUSION

APPA submits that its participation in this proceeding is in the public interest and respectfully asks that its motion to intervene be granted. Further, for the reasons set forth herein, the Secretary should deny FirstEnergy's request for an emergency order under section 202(c) of the FPA.

Respectfully submitted,

**AMERICAN PUBLIC POWER
ASSOCIATION**

/s/ John E. McCaffrey

Delia Patterson
Senior Vice President, Advocacy &
Communications and General Counsel
John E. McCaffrey
Regulatory Counsel
2451 Crystal Drive
Suite 1000
Arlington, VA 22202
(202) 467-2900
dpatterson@publicpower.org
jmccaffrey@publicpower.org

Dated: April 9, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Arlington, Virginia, this 9th day of April, 2018.

/s/ John E. McCaffrey

John E. McCaffrey

2451 Crystal Drive

Suite 1000

Arlington, VA 22202

(202) 467-2900

jmccaffrey@publicpower.org



North America's Building Trades Unions

April 9, 2018

Sean McGarvey
President

Brent Booker
Secretary Treasurer

Newton B. Jones
Boilermakers

Kinsey M. Robinson
Roofers

James P. Hoffa
Teamsters

Terry O'Sullivan
LIUNA

James Boland
Bricklayers and
Allied Craftworkers

Frank Christensen
Elevator Constructors

Kenneth E. Rigmaiden
Painters and Allied Trades

James T. Callahan
Operating Engineers

Joseph Sellers, Jr.
SMART

Lonnie Stephenson
IBEW

Eric M. Dean
Ironworkers

James P. McCourt
Insulators

Daniel E. Stepano
Plasterers' and
Cement Masons'

Mark McManus
UA

Department of Energy
Secretary Rick Perry
Washington, DC 20009

Dear Secretary Perry,

On behalf of the 3 million skilled craft professionals that constitute the 14 affiliates of North America's Building Trades Unions (NABTU), I am writing in support of FirstEnergy Solutions' (FES) request to the U.S. Department of Energy to issue an emergency order to provide cost recovery to coal and nuclear plants in the PJM Interconnection market.

As you know, the FES request came last week when they also announced the retirement of three nuclear facilities over a three-year span. These plant closures place in jeopardy the livelihoods of the 2,300 workers employed by FES, directly impacting the economic and employment engines for the communities they serve.

The impact is compounded by the fact that thousands of NABTU men and women in Ohio and Western Pennsylvania perform millions of manhours at these facilities during scheduled outage work. During this time, 800-1,500 skilled craft workers are required to complete the work safely and on time.

The announcement of additional nuclear retirements is further proof we are at an inflection point in the debate over market reforms. Coal and nuclear are the most job-intensive sources of power generation. North America's Building Trades Unions supports First Energy Solutions request for DOE to use emergency powers and guarantee revenues to coal and nuclear plants in the PJM Interconnection region; maintaining the economic stability of our members and their communities.

Sincerely,

Sean McGarvey
President

cc: Larry Kudlow

Value on Display. EVERY DAY.

nabtu.org | 202.347.1461 | 1-815-16th Street, NW, Suite 600 | Washington, DC 20006





815 SIXTEENTH ST., N.W. • SUITE 600
WASHINGTON, D.C. • 20006-4104



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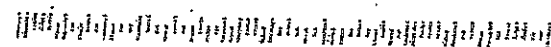
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Secretary Rick Perry
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

20585-



Johnsen, Steven (MA)

From: Schwarzbaum, Paul <PSchwarzbaum@GTTechnologies.com>
Sent: Tuesday, April 10, 2018 3:05 PM
To: Secretary Perry
Subject: Impact of Baseload Power Retirements on National Security

Dear Secretary Perry,

I am the president and CEO of GT Technologies, Inc., a 113 year-old “Tier 1” supplier of engine valvetrain components to the automotive and heavy duty vehicle industries. My customers include such iconic American companies as Ford, GM, Cummins and Caterpillar, as well as leading international manufacturers with large American workforces, including Fiat Chrysler and Bosch.

If any of my three manufacturing plants in Defiance and Toledo, Ohio were to lose power for a sustained period of time, we could shut down multiple U.S. automotive plants and idle hundreds of thousands of American workers, to say nothing of adversely impacting the financial well-being of my own employees, their families, and the scores of businesses with their thousands of employees that depend on my company’s economic activity.

So it is with great concern that I have been following the saga of Ohio-based utility First Energy.

It is also with great appreciation that I have followed your personal efforts to prod the Federal Energy Regulatory Commission to issue sua sponte orders to the North American Electric Reliability Corporation to make the US bulk power system more reliable and resilient.

I appreciate your mindfulness that the DOE’s primary obligation is to national security and thus to assure that the U.S. economy is supported with reliable power. Your staff’s August 2017 report on the reliability and resilience of the electric grid is excellent. I applaud your initiative to direct your staff to create this report with its many sensible policy recommendations!

Market competition must always come second to national security. I say this as a manufacturing company CEO, a Harvard MBA – a person who clearly understands and values capitalism and competition.

Accordingly, I urge you to take whatever legal steps are in your power to assure that Ohio – the Midwest – the USA – will have reliable electrical power; and if that means bailing out First Energy and implicitly showing that PJM’s electricity market is a failed experiment, then so be it. (In fact, the Eastern Interconnection was not designed to support a long-distance “open” electricity market and it is dangerously overstressed.)

Until there is a way to reliably store sufficient quantities of natural gas on site at generating plants and to enable the “black-start” of all baseload power generation plants, only coal-fired plants, nuclear power plants, and hydroelectric dams will be able to address our national security needs for large amounts of resilient power.

More generally, I strongly encourage you to continue to press FERC to do its job; and for the DOE to take the lead in actively coordinating the development of a comprehensive set of policies and strategies with the Department of Homeland Security and U.S. Armed Forces to neutralize the threat to the U.S. bulk power system posed by disruptions to fuel supply and power distribution. Potential disruptions include winter weather (ice storms and frozen gas lines); cyber-terrorism (four US gas pipeline firms hit by coordinated cyber attacks in the past five days); and physical terrorism (recall the attack on PG&E’s Metcalf substation in 2013). With

electric utility CEOs predicting the retirement of a material portion of our country's baseload generation capacity over the next few years, and with ISO-New England forecasting rolling blackouts in their region by 2025, time is of the essence.

Thank you for championing the reliable and resilient generation and distribution of electricity to support America's national security.

Sincerely,

Paul Schwarzbaum
President and CEO
GT Technologies, Inc.

April 10, 2018

Honorable Rick Perry, Secretary
Department of Energy
1000 Independence Ave. SW
Washington, DC 20585

Dear Secretary Perry,

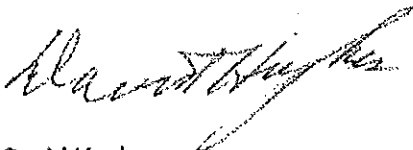
I am a FirstEnergy [PJM Interconnection] ratepayer. I am writing to ask that you reject FirstEnergy's subsidiary First Energy Solution's (FES) request under section 202(c) of the Federal Power Act for a declaration of emergency. There is no emergency. As PJM has made clear: "Nothing we have seen to date indicates that an emergency would result from the [FirstEnergy] generator retirements."

Granting FirstEnergy's request would be very disruptive to competitive markets and on that basis alone should be rejected.

FirstEnergy has a long track record of bad management decisions that have resulted in its ratepayers having to pay some of the highest electricity rates in the country. To grant this request would be another ratepayer bailout for bad management. Beginning in the 1970s with the decision to build 9 nuclear units, FirstEnergy management has made a series of bad decisions. The mismanagement of the construction of the Perry I and Beaver Valley II nuclear units resulted in \$9 billion in cost overruns. Most of these costs were passed on to ratepayers in the 1980s even though these units represented excess capacity in the FirstEnergy generation portfolio. Only high rates and billions of dollars in "stranded cost" recovery in the form of a "competitive transition charge" have likely kept First Energy Solutions from declaring bankruptcy a long time ago.

In addition, FirstEnergy has used a second phony argument for claiming it deserves a bailout. It claims it is not receiving sufficient compensation for the "unique benefits" that its nuclear units provide. FirstEnergy has been attempting to get the Ohio and Pennsylvania legislatures to give it a bailout in the form of "Zero Emissions Credits", another ratepayer charge. However, despite the myth that nuclear plants are a clean source of energy, the fact is they routinely vent some of the deadliest gases known to exist. And, the process to make commercial grade fuel for nuclear plants contributes to Climate Change.

Mr. Secretary, enough is enough. I urge you to do the right thing on behalf of the millions of ratepayers, not only in the FirstEnergy service territory, but throughout the PJM Interconnection: put an end to this history of gouging ratepayers to cover inept management.

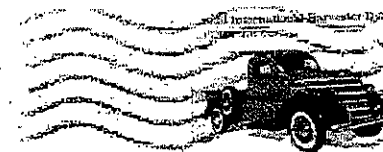


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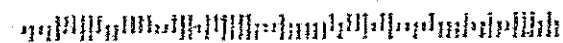
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Honorable Rick Perry, Secretary
Department of Energy
1000 Independence Ave. SW
Washington, DC 20585

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COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
400 NORTH STREET, HARRISBURG, PA 17120

Document 38

April 10, 2018

Via Overnight and Electronic Mail

The Honorable Rick Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave. S.W.
Washington D.C. 20585
the.secretary@hq.doe.gov

Mr. Bruce Walker
Assistant Secretary
Office of Reliability and Energy Reliability
U.S. Department of Energy
1000 Independence Ave. S.W.
Washington D.C. 20585
bruce.walker@hq.doe.gov

Ms. Catherine Jereza
Deputy Assistant Secretary
Office of Electricity Delivery and Energy
Reliability
U.S. Department of Energy
1000 Independence Ave. S.W.
Washington D.C. 20585
Catherine.jereza@doe.gov

**Re: Motion to Intervene and Protest of Pennsylvania Public Utility
Commission**

Dear Secretary Perry, Assistant Secretary Walker and Deputy Assistant Secretary Jereza:

The Pennsylvania Public Utility Commission (PAPUC), by and through its undersigned counsel, files this Motion to Intervene and Protest in the proceeding involving the March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act Section 202(c) by FirstEnergy Solutions Corp. (FES).

I. PROCEDURAL BACKGROUND

On March 29, 2018, FES sent a letter (Request) to U.S. Department of Energy (Department) Secretary James Richard Perry, formally requesting that Secretary Perry invoke his emergency authority under Federal Power Act (FPA) Section 202(c),¹ to find that an emergency condition exists in the PJM Interconnection (PJM) territory that requires immediate intervention. In the Request, FES seeks relief under Section 202(c), whereby the Secretary would order “certain existing nuclear and coal-fired generators” to contract with PJM for energy, capacity, and ancillary services to “maintain the stability of the electric grid.”² Further, FES requests that Secretary Perry order PJM to “promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide.”³ FES served the Request on numerous affected parties.

II. MOTION TO INTERVENE

The PAPUC is the agency charged with the responsibility for regulating electric utility rates and service within the Commonwealth of Pennsylvania, pursuant to the Public Utility Code.⁴ In this role, the PAPUC has authority to represent the interests of Pennsylvania electric consumers in proceedings before federal courts, the Federal Energy Regulatory Commission (FERC) and other federal agencies including the Department.

¹ 16 U.S.C.S. § 824a (c).

² FES Letter at 1.

³ *Id.* at 1.

⁴ 66 Pa. C.S. § 101 *et seq.*

Pennsylvania is centrally located within the Mid-Atlantic Region of the United States and possesses significant amounts of fossil fuel generation, as well as renewable generation. Pennsylvania is a major consumer of electricity with its industrial, commercial, and residential load and is one of the country's largest producers of natural gas, primarily from the Marcellus Shale formation. Growing development of this fuel source has made natural gas plentiful and economically attractive. This, in turn, has greatly accelerated a shift away from coal-fired generation toward gas-fired electric generation, along with construction of gas-fired electric generation, including combustion turbines.

The PAPUC has a vested interest in ensuring that adequate generation exists to meet the current and future needs of its residents and the region. In this regard, the PAPUC has been an active supporter of electric wholesale capacity markets and the initiatives advanced by the FERC and PJM, the regional transmission organization, to incentivize the continued development of new generation in the Mid-Atlantic region. Moreover, the PAPUC has a significant and direct interest in this proceeding that is not adequately represented by other parties.

If FES' Request is granted, prospective payments made pursuant to an Emergency Order would almost certainly be recovered from consumers throughout the PJM region, including millions of ratepayers in the Commonwealth of Pennsylvania. The PAPUC opposes the Request because, contrary to the assertions made therein, no foreseeable reliability risk exists. We reserve the right to supplement this preliminary pleading to

explain, in detail, what effect the Request would have on Pennsylvania's ratepayers and competitive market.

III. PROTEST

The PAPUC protests FES' Request as legally and factually insufficient under Section 202 (c), and further, contends that the damage to electric wholesale markets and, by extension, retail customers far outweighs the speculative benefits advocated by FES. In support of its Protest, the PAPUC avers as follows:

- The overwhelming evidence presented in letters filed by numerous parties to this proceeding demonstrates that no "emergency condition" exists to justify the extraordinary provisions of Section 202(c) of the FPA. Additionally, the allegations are altogether too remote to be actionable. FES' nuclear units are not scheduled for deactivation until May 31, 2020, for one unit, and May 31, 2021, for 3 other units at two plant sites. Wholesale market prices and market structures in future years may depart substantially from current market prices and structures. In the absence of credible evidence, FES' Request fails as legally and factually adequate to justify the relief it requests.
- FES' Emergency Order Request seeks unprecedented and overbroad relief. FES threatens the efficient functioning of organized competitive wholesale electricity markets by providing *de facto* cost of service treatment to coal and nuclear generation without adequate justification.
- Reliability is not at credible risk, as PJM's recent filings demonstrate. Moreover, if reliability concerns do arise, PJM has adequate processes for addressing those concerns.⁵
- Resilience and reliability are complex topics that are currently being examined within the PJM stakeholder process. These processes should be permitted to go forward, rather than coopting these

⁵ Reliability Must Run (RMR) protocol in PJM Manual 14D, pursuant to which PJM may request a unit to operate past its desired deactivation date.

processes through the Department's action vis a vis Section 202(c). PJM has an ongoing stakeholder process to address market design improvements, and is currently examining several energy, capacity, and ancillary market reforms, in addition to grid resiliency⁶ issues. FES should not be permitted, through this Request, to circumvent the thorough stakeholder process currently established in PJM to elevate their self-serving interests over those of other competitive suppliers, technologies, utilities and end-use customers.

- If granted, the Request may unnecessarily raise energy costs for consumers and directly undercut the tremendous economic advantage to the United States from abundant natural gas deposits.
- FES, through its Request, is seeking to insert itself into matters of state jurisdiction as it relates to resource adequacy, resource selection criteria and state energy policy. These are matters established by the Governor and the Pennsylvania General Assembly,⁷ as implemented through the PAPUC, and other departments within the Commonwealth of Pennsylvania.

The PAPUC respectfully urges the Department to give all interested parties sufficient time to present their responses to the FES Request before the Department rules on the Request. The PAPUC supports and concurs in the Trade Group request, filed March 30, 2018, seeking a 60-day comment period.

⁶ *Grid Resilience in Regional Transmission Organizations and Independent System Operators*, Docket No. AD18-7-000, Order issued January 8, 2018.

⁷ 66 Pa.C.S. §§2801 *et seq.* and §§ 2201 *et seq.*

IV. SERVICE OF DOCUMENTS

The PAPUC designates the following persons to receive service and communications on its behalf in this proceeding:

James P. Melia
James A. Mullins,
Pennsylvania Public Utility Commission
400 North Street, Harrisburg, PA 17120
Tel: 717-787-1859; 717-787-5978
jamullins@pa.gov
jmelia@pa.gov

V. CONCLUSION

For the foregoing reasons, the PAPUC respectfully requests that the Department grant the PAPUC's Motion to Intervene, accept its Protest, provide all interested parties 60 days to file comments on the Request and reject FES' Request for relief under Section 202(c) of the FPA.

Respectfully submitted,

/s/ James A. Mullins
James A. Mullins
Assistant Counsel
Attorney ID # 77066
jamullins@pa.gov

Pennsylvania Public Utility Commission
P.O. Box 3265
400 North Street
Harrisburg, PA 17120
Tel: 717-787-5978

Dated: April 10, 2018



Rockland Electric Company

Margaret Comes
Associate Counsel
Law Department

April 10, 2018

VIA OVERNIGHT MAIL AND EMAIL

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585

Bruce Walker
Assistant Secretary,
U.S. Department of Energy
Office of Electric Delivery and Energy Reliability
1000 Independence Ave., S.W.
Washington, DC 20585

Catherine Jereza
Deputy Assistant Secretary
U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
1000 Independence Ave., S.W.
Washington, DC 20585

RE: First Energy Solutions Corp. March 29, 2018 Request for Emergency Order
Motion to Intervene of Rockland Electric Company

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

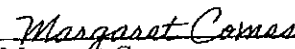
Enclosed is Rockland Electric Company ("Rockland") Motion to Intervene in the above proceeding concerning First Energy Solutions Corp.'s March 29, 2018 ("FES") Request For Emergency Action ("Request"). Rockland is a public utility serving approximately seventy-two thousand retail electric customers in New Jersey who will be affected by the FES request.

Rockland Electric Company
4 Irving Place – Room 1810-S New York NY 10003 212 460 3013 212 677 5850 fax comesm@coned.com

Hon. Richard Perry
Page 2

Rockland also is a member of PJM Interconnection LLC which will be affected by the FES request. If the Request is not denied outright, Rockland requests that interested parties be given 60 days to file comments.

Respectfully submitted,


Margaret Comes

enc.

c: William S. Scherman, Esq.
Rick C. Giannantonio, Esq.

UNITED STATES OF AMERICA BEFORE THE
DEPARTMENT OF ENERGY

The Request for Emergency Order of)
First Energy Solutions Corp. dated) DOE Docket No. _____
March 29, 2018)

MOTION TO INTERVENE

Rockland Electric Company ("Rockland") hereby moves to intervene in the above-captioned proceeding.

I. PROCEDURAL BACKGROUND

On March 29, 2018, First Energy Solutions Corp. (FES) issued a letter request to the Honorable James Richard Perry, Secretary of Energy, requesting that the Secretary use emergency authority under Section 202(c) of the Federal Power Act to find that an emergency condition exists in the PJM Interconnection, L.L.C. (PJM) territory requiring immediate intervention. Specifically, FES requested that the Secretary (a) order "certain existing nuclear and coal-fired generators ... to enter into contracts" with PJM to generate and transmit energy, capacity, and ancillary services to "maintain the stability of the electric grid" and (b) order PJM to "promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide" to energy markets and the public.

II. MOTION TO INTERVENE

Rockland is a public utility engaged in the transmission and distribution of electricity in New Jersey, and serves approximately 72,000 retail electric customers in New Jersey. Rockland Electric owns transmission facilities in PJM Interconnection, L.L.C. ("PJM") and is a member of PJM. Rockland and its customers will be directly affected by the outcome of these proceedings, and its interests cannot be represented adequately by any other party.

III. NOTICES AND CORRESPONDENCE

All communications, pleadings and orders with respect to this proceeding should be sent to the following individuals:

Brian Wilkie
Energy Policy and Regulatory Affairs
Rockland Electric Company
4 Irving Place
Room 17-430
New York, New York 10003
Telephone: (212) 460-4517
Facsimile: (212) 228-4072
e-mail: wilkieb@coned.com

Margaret Comes
Law Department
Rockland Electric Company
4 Irving Place
Room 1815-S
New York, New York 10003
Telephone: (212) 460-3013
Facsimile: (212) 677-5850
e-mail: comesm@coned.com

IV. CONCLUSION

Rockland Electric Company respectfully requests that the Department of Energy accept this motion permitting Rockland Electric Company to intervene in the above proceeding.

Dated: April 10, 2018
New York, New York

Respectfully submitted,

ROCKLAND ELECTRIC COMPANY

By: Margaret Comes
Margaret Comes
Associate Counsel
Rockland Electric Company
4 Irving Place
Room 1815-S
New York, New York 10003

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document on the William S. Scherman, Esq., Rick C. Giannantonio, Esq. and other parties to this proceeding.

Dated at New York, New York this April 10, 2018.

Margaret Comes

Margaret Comes

UNITED STATES DEPARTMENT OF ENERGY

)	
Request for Emergency Order)	
Pursuant to Federal Power Act)	DOE Docket/Order No. _____
Section 202(c) by FirstEnergy)	
Solutions Corp.)	
_____)	

SIERRA CLUB'S MOTION TO INTERVENE

Sierra Club moves to intervene in any proceeding that the Department of Energy (the "Department") may undertake with regard to the request by FirstEnergy Solutions Corp. ("FirstEnergy") for an emergency order, pursuant to section 202(c) of the Federal Power Act, 16 U.S.C. 824a(c), made on March 29, 2018 (the "Request"). *See* 18 C.F.R. § 385.214(a)(3).¹

BACKGROUND

FirstEnergy has requested an order that would: (a) "direct ... certain existing nuclear and coal-fired generators" within the region operated by PJM Interconnection, LLC ("PJM") to "enter into contracts and all necessary arrangements with PJM ... to generate, deliver, interchange and transmit electric energy, capacity and ancillary services"; and (b) require "PJM to pay" those generators "just and reasonable rates that provide for full recovery of [their] fully allocated costs and a fair return of equity." Request 1, 31. Sierra Club filed a letter with the Department on March 30, 2018, urging the Department to deny that relief,

¹ In the past, the Department has advised parties with an interest in orders issued under section 202(c) to follow the procedures set out in 18 C.F.R. Subpart 385, though those regulations do not, by their terms, apply to the Department's actions under that section, 18 C.F.R. § 385.201.

or at a minimum, to open formal proceedings to solicit public comment on the Request. *See generally* Letter from Casey Roberts & Sanjay Narayan to Hon. Rick Perry & Catherine Jereza dated March 30, 2018 (attached).

STATEMENT OF OPPOSITION

Sierra Club opposes FirstEnergy's Request; the order sought by FirstEnergy is beyond the Department's authority under section 202(c), and is not reasonably supportable, or in the public interest. *See generally id.* (stating Sierra Club's position and basis in fact and law).²

BASIS FOR INTERVENTION

Sierra Club has a substantial interest that may be directly affected by the outcome of any proceeding responding to the Request. The requested order would require PJM to negotiate contracts with dozens of coal and nuclear-power generation units across PJM's territory, to provide those generation owners with recovery of all their costs, including a rate of return. These additional costs would be passed on to PJM's ratepayers. The relief that FirstEnergy seeks for all merchant units in PJM is extremely similar to that called for in the Grid Resiliency Pricing Rule, unanimously rejected by the Federal Energy Regulatory Commission

² Sierra Club reserves the right to amend or alter its position, depending on the action, if any, taken by the Department in response to the Request, and the actions of other affected parties. *See* 18 C.F.R. § 385.214(b)(1) (applicant to intervene must only state position "to the extent known.")

last fall.³ That rule was projected to have costs of up to \$8.1 billion annually for PJM ratepayers.⁴

As of late 2016, Sierra Club had over 112,000 members who reside in the service territory of PJM and pay electricity bills to load-serving entities that buy power from PJM. These members would see higher electricity bills as a result of FirstEnergy's requested order. These financial harms to our members are germane to Sierra Club's mission, which includes addressing the quality of the human environment by promoting an affordable transition to clean energy. Sierra Club also has offices in PJM territory and is itself a ratepayer affected by any cost increases put in place as a result of an order responsive to FirstEnergy's request.

In addition, Sierra Club members are affected by the pollution that will be produced by continued operations of coal-fired power plants that would otherwise retire in the near future. As described in our previous letter, most of the retirements vaguely alluded to by FirstEnergy are several years away. However, several units have already been cleared for retirement, such as FirstEnergy's Pleasants Power Station, which PJM has determined can close on January 1, 2019 without any adverse impacts on reliability.⁵ Sierra Club has members who live near to the

³ DOE, Notice of Proposed Rulemaking: Grid Resiliency Pricing Rule, available at <https://www.energy.gov/sites/prod/files/2017/09/f37/Notice%20of%20Proposed%20Rulemaking%20.pdf>.

⁴ See Robbie Orvis et al., The Department of Energy's Grid Resilience Pricing Proposal: A Cost Analysis (Oct. 2017), available at http://energyinnovation.org/wp-content/uploads/2017/12/20171025_Resilience-NOPR-Cost-Research-Note-UPDATED.pdf (Table 2: Annual Increase in Customer Costs by Region, Reading 4, Total).

⁵ Robert Walton, PJM greenlights FirstEnergy to deactivate coal plant units at Pleasants Power Station, UtilityDive (Mar. 22, 2018), at <https://www.utilitydive.com/news/pjm-greenlights-firstenergy-to-deactivate-coal-plant-units-at-pleasants-pow/519791/>.

Pleasants Power Station, and are therefore negatively affected by air pollution from the coal-burning plant. This ongoing harm to Sierra Club's members would otherwise cease upon the plant's deactivation, but would persist if the plant received additional compensation as envisioned in the Request.

The Sierra Club has a demonstrated organizational commitment to the above-described interests. The Sierra Club's Beyond Coal Campaign seeks to reduce the pollution currently being produced by coal-fired power plants such as those that FirstEnergy seeks to support. To that end, Sierra Club has participated in regulatory proceedings relating to nearly all of the units listed in Attachment A to FirstEnergy's request, seeking to mitigate their pollution, minimize costs that ratepayers must bear to support these plants, or both.

For all of those reasons, Sierra Club has an interest that may be directly affected by the outcome of any proceeding in response to FirstEnergy's Request, and Sierra Club's participation is in the public interest.

SERVICE AND COMMUNICATIONS

Service upon Sierra Club may be made, and communications to Sierra Club may be addressed, to:

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CONCLUSION

For these reasons, Sierra Club respectfully requests that the Department allow Sierra Club to intervene in any proceedings conducted in response to FirstEnergy's Request.

/s/ Casey Roberts

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March 30, 2018

Via Electronic Mail and U.S. Mail

Hon. Rick Perry
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Dear Mr. Perry and Ms. Jereza:

FirstEnergy Solutions Corp. ("FirstEnergy" or "FES") has submitted a request for an emergency order, pursuant to, *inter alia*, section 202(c) of the Federal Power Act. As envisioned by FirstEnergy, such order would result in utility customers paying above-market cost-of-service rates (including a guaranteed profit) for at least four years to the owners of all merchant coal and nuclear generating units in PJM that have at least 25 days' worth of onsite fuel. According to FirstEnergy, such payments are necessary to prop up those merchant coal and nuclear plants in order to ensure "resiliency" in the PJM system and avoid an "emergency" triggering the extraordinary powers of section 202(c). In reality, however, FirstEnergy has not shown that resiliency is at risk, or that the aging coal and nuclear units that may be retiring over the next seven years are needed to ensure such resiliency. Nor has FirstEnergy proposed a remedy that could be legally authorized under the Federal Power Act.

FirstEnergy's request here is nothing more than a slightly scaled down version of the Grid Resiliency Pricing proposal that the Federal Energy Regulatory

Commission (“FERC”) unanimously rejected less than three months ago. FirstEnergy has not and could not provide any basis for a different result to be reached here. As such, the Department can reject FirstEnergy’s legally flawed and factually unsupported request out of hand.

If the Department does not reject FirstEnergy’s request as not approvable on its face, we urge you to open up a formal docket, or undertake some other public proceedings to solicit public comments, so that the Department can reach a considered decision in this matter.¹ As set forth below, FirstEnergy’s application raises substantial legal and policy issues, will impose staggering costs on PJM ratepayers, and undermine competition and investor certainty in the PJM marketplace.

I. Procedure and Standing

In this letter, Sierra Club sets out its initial comments in response to FirstEnergy’s request. Should the Department not reject FirstEnergy’s request outright, we expect that it will open a docketed proceeding to address the request, as it did in response to the request from PJM Interconnection last year regarding the Yorktown units.² Sierra Club intends to fully participate in that proceeding through the submission of evidence and legal argument, and to seek rehearing should the Department issue an order outside the scope of its authority.

Sierra Club feels compelled to offer these initial comments only the day after FirstEnergy’s request was filed because, as FirstEnergy directly acknowledges in the request, it “likely will file for bankruptcy by the end of March 2018.”³ A bankruptcy filing may affect the rights of entities such as the Sierra Club to fully protect their interests in this matter.

Sierra Club has a substantial interest in this matter and would be adversely affected in numerous ways by an order along the lines of what FES proposes. FES’ proposed order would require PJM to negotiate contracts with dozens of coal and nuclear-power generation units across PJM’s territory, to provide those generation owners with recovery of all their costs, including a rate of return. These additional

¹ The Department has taken the position that its orders, under section 202(c), are “proceedings” within the meaning of section 313 of the Federal Power Act, 16 U.S.C. § 8251. That interpretation of the Act emphasizes the appropriateness of engaging in the procedural steps by which the Department conducts its other proceedings—most importantly, notice and an opportunity for interested parties to comment.

² DOE, Federal Power Act Section 202(c) – PJM Interconnection & Dominion Energy Virginia, 2017, at <https://www.energy.gov/oe/downloads/federal-power-act-section-202c-pjm-interconnection-dominion-energy-virginia-2017-0>.

³ FirstEnergy’s March 29, 2018 request to the Department at 8, 20.

costs would be passed on to PJM's ratepayers. The relief that FES seeks for all merchant units in PJM is extremely similar to that called for in the Grid Resiliency Pricing Rule last fall.⁴ That rule was projected to have costs of up to \$8.1 billion annually for PJM ratepayers.⁵

As of late 2016, Sierra Club had over 112,000 members who reside in the service territory of PJM and pay electricity bills to load-serving entities that buy power from PJM. These members would see higher electricity bills as a result of FirstEnergy's requested order. These financial harms to our members are germane to Sierra Club's mission, which includes addressing the quality of the human environment by promoting an affordable transition to clean energy. Sierra Club also has offices in PJM territory and is itself a ratepayer affected by any cost increases put in place as a result of an order responsive to FES' request.

In addition, Sierra Club members are affected by the pollution that will be produced by continued operations of coal-fired power plants that would otherwise retire in the near future. As described below, most of the retirements vaguely alluded to by FES are several years away. However, several units have already been cleared for retirement, such as FirstEnergy's Pleasants Power Station, which PJM has determined can close on January 1, 2019 without any adverse impacts on reliability.⁶ Sierra Club has members who are negatively affected by air and water pollution from Pleasants that would otherwise cease upon its deactivation, but would persist if the plant received additional compensation as envisioned in FES' request.

The Sierra Club has a demonstrated organizational commitment to the above-described interests. The Sierra Club's Beyond Coal Campaign seeks to reduce the pollution currently being produced by coal-fired power plants such as those that FES seeks to support. To that end, Sierra Club has participated in regulatory proceedings relating to all of the units listed in Attachment A to FES' request,

⁴ DOE, Notice of Proposed Rulemaking: Grid Resiliency Pricing Rule, available at <https://www.energy.gov/sites/prod/files/2017/09/f37/Notice%20of%20Proposed%20Rulemaking%20.pdf>.

⁵ See Robbie Orvis et al., The Department of Energy's Grid Resilience Pricing Proposal: A Cost Analysis (Oct. 2017), available at http://energyinnovation.org/wp-content/uploads/2017/12/20171025_Resilience-NOPR-Cost-Research-Note-UPDATED.pdf (Table 2: Annual Increase in Customer Costs by Region, Reading 4, Total).

⁶ Robert Walton, PJM greenlights FirstEnergy to deactivate coal plant units at Pleasants Power Station, UtilityDive (Mar. 22, 2018), at <https://www.utilitydive.com/news/pjm-greenlights-firstenergy-to-deactivate-coal-plant-units-at-pleasants-pow/519791/>.

seeking to mitigate their pollution, minimize costs that ratepayers must bear to support these plants, or both.

II. FirstEnergy's Application Does Not Describe Any Emergency Within the Meaning of Section 202(c) of the Federal Power Act.

1. Section 202(c) Confines Emergencies to Specific, Imminent Events.

Section 202(c) of the Federal Power Act provides the Department with authority over “the generation of electric energy” only “[d]uring the continuance of any war in which the United States is engaged,” or if “the [Department] determines that an emergency exists by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy, or of fuel or water for generating facilities, or other causes.” 16 U.S.C. § 824a(c)(1). The statute’s use of the present text—that an emergency “exists”—demands, at a minimum, that an emergency be present, certain, and immediate, rather than distant and contingent.

That certainty and immediacy is inherent in the statute’s fundamental requirement—an “emergency.” The Act does not define “emergency”; according to the dictionary, the word primarily demands “an unforeseen combination of circumstances or the resulting state that calls for *immediate* action.” Merriam Webster’s Dictionary 407 (11th ed. 2009) (emphasis added). An emergency, by definition, is not an anticipated event occurring, perhaps, years in the future; it describes an imminent, unavoidable threat.

The surrounding context emphasizes the exigency of the circumstances described by section 202(c)’s reference to an “emergency”: the authority granted by section 202(c) is, primarily, a war-time power. 16 U.S.C. § 824a(c) (authorizing orders during “continuance of any war in which the United States is engaged”). See *Jarecki v. G.D. Searle & Co.*, 367 U.S. 303, 307 (1961) (noting that statutory terms should be interpreted in context of nearby parallel terms “in order to avoid the giving of unintended breadth to the Acts of Congress”). An “emergency” under the statute is limited to circumstances that are similarly urgent: “a *sudden* increase in the demand for electric energy,” for example. 16 U.S.C. § 824a(c) (emphasis added). See *Richmond Power and Light v. Federal Energy Reg’y Comm.*, 574 F.2d 610, 615 (D.C. Cir. 1978) (holding that section 202(c) “speaks of ‘temporary’ emergencies, epitomized by wartime disturbances” and that statute is reasonably understood to exclude circumstances such as “dependence on imported oil”).

Section 202(c) is, moreover, expressly meant to address short-term, “temporary” conditions—it provides no authority to implement long-term policy preferences, in response to potential difficulties that may emerge years from now. *Id.* Congress underlined the limited scope of section 202(c) when enacting the provision. “This is

a temporary power designed to avoid a repetition of the conditions during the last war, when a serious power shortage arose. Drought and other natural emergencies have created similar crises in certain sections of the country; such conditions should find a federal agency ready to do all that can be done in order to prevent a breakdown in electric supply.” S. Rep. No. 74-621 at 49 (1935).⁷

The Department’s regulations confirm those limitations. They define an “emergency” as “an *unexpected* inadequate supply of electric energy” resulting from “the unexpected outage or breakdown of facilities,” which may result from “weather conditions, acts of God, or unforeseen occurrences not reasonably within the power of the affected ‘entity’ to prevent.” 10 C.F.R. § 205.370 (emphases added). Anticipated customer demand can be an emergency, only upon “a *sudden* increase” in such demand emphasis). Those examples reflect the limited nature of the emergencies encompassed by section 202(c): unusual, unforeseen, and unexpected events, with immediate and substantial consequences.

2. *The Structure of the Act Further Confirms That the Authority Conferred by Section 202(b) Is Limited to Unusual, Unexpected Circumstances.*

Other portions of the statute, outside section 202(c) itself, reinforce that section’s tightly limited scope. Section 202(b) confirms the constrained nature of the Department’s emergency powers under section 202(c). That section provides cabined authority (exercised by the Federal Energy Regulatory Commission, rather than the Department) to “direct a public utility ... to establish physical connection[,] ... sell energy, or exchange energy” with other persons, under normal, non-emergency conditions. 16 U.S.C. § 824a(b). The statute establishes specific standards and procedural requirements for such non-emergency orders. *Id.* Section 202(c) removes many of those requirements—but does so only during war-time or similarly extreme circumstances. 16 U.S.C. § 824a(c). *See Otter Tail Power Co. v. Fed. Power Comm.*, 429 F.2d 232, 233-34 (1970) (holding that section 202(c) “enables the Commission to react to a war or national disaster,” while section 202(b) “applies to a crisis which is likely to develop in the foreseeable future”). That structure establishes a clear divide between quotidian energy-system management (even where necessary to avert a future crisis), governed by section 202(b), and unusual, unforeseeable ‘emergencies,’ governed by section 202(c). Read within that structure, section 202(c) cannot apply to routine planning matters; such application would render section 202(b) unnecessary, and eviscerate its procedural and substantive requirements.

⁷ While Congress amended section 202(c) in 2015, it did not alter the Department’s basic grant of emergency authority; it only addressed occasions on which a Department order might produce a conflict with other laws. *See* H.R. Rep. No. 114-357 (2015).

Section 215 of the Federal Power Act, added in 2005, suggests additional boundaries on the Department's powers under section 202(c). Section 215 provides a detailed enforcement mechanism, with specified procedures, remedies, and timeframes, for federal reliability standards. *See generally* 16 U.S.C. § 825o. As the D.C. Circuit has recognized, the portion of the Federal Power Act that predates that section—which includes section 202(c)—did not provide the federal government with the power to enforce requirements designed to ensure broad, long-term reliability requirements. *Alcoa, Inc. v. FERC*, 564 F.3d 1342, 1344 (D.C. Cir. 2009) (noting that prior to the Energy Policy Act of 2005, “the reliability of the nation’s bulk-power system depended on participants’ voluntary compliance with industry standards”). Consequently, a bare violation of a federal reliability standard cannot suffice to provide the Department with “emergency” power to enforce that standard under section 202(c). Reading section 202(c) to permit direct enforcement of reliability requirements through emergency orders would bypass the limits and procedures that Congress enacted in section 215 to constrain such enforcement. *See California Independent System Operator Corp. v. FERC*, 372 F.3d 395, 401-2 (D.C. Cir. 2004) (“Congress’s specific and limited enumeration of [agency] power over [particular matter] in [one section of Federal Power Act] is strong evidence that [separate section] confers no such authority on [agency].”). Similarly, the Federal Power Act contains separate and independent provisions to address wholesale rates, and any perceived insufficiency of such compensation. 16 U.S.C. § 824d & 824e. Those provisions likewise indicate that any perceived inadequacy in the wholesale markets cannot be an emergency sufficient to provide the Department with authority under section 202(c).

3. *The Application Does Not Contain Information Sufficient to Support Any Finding that an Emergency Exists under Section 202(c).*

a. *The Long-Term Resource-Allocation Concerns Described by FirstEnergy Are Not an “Emergency”.*

FirstEnergy’s request describes no imminent, specific threat that could plausibly qualify as an “emergency” under the statute. The request asserts a need for “fuel diversity,” and other parties’ failure to pay FirstEnergy (and other merchant coal and nuclear generators) the “compensation” to which FirstEnergy believes itself to be entitled. Request 3. It cites no imminent shortfall in supply; it states only that certain units have dispatched in the past, and suggests that such units may be replaced by other sources of supply over the next seven years. *Id.* at 8-9. The Department has never exercised section 202(c) under similar circumstances; in every case, it has carefully established an imminent, unavoidable, and specific

short-fall in electricity supply, and issued narrowly tailored orders intended to address that specific shortfall.⁸

Even if those suggestions were adequately supported (and they are not, see Part III, below), they would not suffice to demonstrate an emergency under section 202(c). The Department has made clear that its authority, under section 202(c), may only be exercised to address “a *specific* inadequate power supply situation.” 10 C.F.R. § 205.371 (emphasis added). FirstEnergy’s application alleges no such specific situation; indeed, it acknowledges as much, in its failure to meaningfully address the application requirements specified in the Department’s regulations. Request 30-31. As the D.C. Circuit has noted, such “long-term” policy concerns, associated with “broad questions of resource allocation,” are not the proper subject of an emergency order under section 202(c). *Richmond Power & Light*, 574 F.3d at 615-16 (citation omitted).

b. The Entity Authorized to Address FirstEnergy’s Concerns Has Already Established That There Is No Need for Emergency, Near-Term Action.

The Federal Power Act (and other statutes) give the Federal Energy Regulatory Commission (and the National Electric Reliability Council) primary authority over the questions that FirstEnergy asks this Department to resolve by emergency order. *E.g.*, Request 7-8 & 27 (asserting that “wholesale pricing” is not providing “full[] compensa[tion]” to FirstEnergy and threat to long-term “reliability”), and 16 (claiming non-specific “reliability” concerns). See 16 U.S.C. §§ 824d & 824o. As noted above, that the Federal Power Act includes separate, closely cabined provisions addressing such matters strongly suggests that FirstEnergy’s stated concerns are not appropriately addressed through section 202(c). Rather, they are matters for FERC, and for NERC.

And FERC has already squarely addressed, and rejected, the primary rationale provided by FirstEnergy for an order. As FirstEnergy acknowledges, FERC very recently rejected a proposal by the Department to require certain grid operators, including PJM, to provide cost-based compensation to merchant coal and nuclear generators. See FERC, Grid Reliability and Resilience Pricing, Order Terminating Rulemaking Proceeding, Initiating New Proceeding, and Establishing Additional Procedures, 162 FERC ¶ 61,012 (Jan. 8, 2018). FERC found that existing tariffs

⁸ FirstEnergy cites the Department’s recent orders regarding the Yorktown power plant. Request 19. But as the Department made clear in response to Sierra Club’s requests for rehearing, those Orders were only issued after the Department found that the orders were the sole means of avoiding “immediate interrupt[ions of] service” to a substantial portion of Virginia, and were narrowly tailored to avoid those defined, established interruptions. Summary of Findings for Department of Energy Order No 202-17-4 at 6-7.

were not unjust and unreasonable, based on the evidence that no “past or planned generator retirements . . . [are] a threat to grid resilience. *Id.* at 15. FirstEnergy presents essentially the same evidence of a threat to resiliency that the Commission rejected just a few months ago. FirstEnergy did not even seek rehearing of the Commission’s January 8 order, but instead seeks to relitigate the issue in a forum it views as more favorable. The Department should not accept FirstEnergy’s invitation to reconsider an issue decided not even three months ago by a unanimous FERC.

Although FERC decided there was no urgent threat to the grid’s reliability to justify the extraordinary action proposed by the Department, it did initiate a docket to promptly and more comprehensively address whether additional steps are needed to ensure resilience. Jan. 8 Order at 17-20. While FirstEnergy asserts that FERC’s ongoing docket to examine the problem that FirstEnergy complains of is “too little, too late,” Request at 10, FERC’s ongoing proceeding is precisely the forum to address the kinds of longer-term issues that FirstEnergy alleges, such as a substantial portion of the generation fleet retiring over a number of years. Likewise, the energy and capacity market reforms that PJM is currently considering, and will shortly present to FERC, are the proper forum to address any shortcomings in market design.

4. *The Relief Requested by the Application Is Not “Just and Reasonable” Compensation Within the Meaning of Section 202(c).*

FirstEnergy asks the Department to require that it and other merchant coal and gas generators receive compensation for “operating expenses, costs of capital and debt, and a fair return on equity and investment,” and specifically prescribe “full cost recovery consistent with ratemaking standards and principles or (b) full recovery of all costs necessary to ensure continued operations.” Request 31-32. FirstEnergy asks that contracts setting out this cost recovery be negotiated within 15 days, a virtual impossibility given the enormous number of units for which FirstEnergy seeks compensation and the likelihood that none of these units, which have operated in competitive markets for years, are prepared to present cost-of-service data to PJM. Moreover, FirstEnergy asks the Department, “if PJM and the owners are unable to agree to the contractual terms” within 15 days, to itself “determine just and reasonable rates.” *Id.*

As an initial matter, the Department’s regulations specify that, should the affected parties be unable to reach an agreement as to rates, the Department “shall . . . refer the rate issues to the Federal Energy Regulatory Commission.” 10 C.F.R. § 205.376. The Department cannot, therefore, grant FirstEnergy’s request that it directly set “just and reasonable rates,” Request at 32. The determination of just and reasonable wholesale rates is a matter indisputably within FERC’s jurisdiction, not that of the Department.

More importantly, the Federal Power Act allows the Department only to implement “just and reasonable” terms. 16 U.S.C. § 824a(c)(1). And the “full recovery” of costs and a fair return on equity that FirstEnergy requests is (Request 31)—as FERC itself has suggested—not demonstrably just or reasonable. In its January 8, 2018 order in RM18-1-000, the Commission held that the proposed remedy to “allow all eligible resources to receive a cost-of-service rate regardless of need or cost to the system” had not been shown to be just and reasonable nor to avoid undue discrimination. *Id.* at 16. FirstEnergy’s proposed compensation here suffers from many of the same flaws in the proposal that FERC rejected, including but not limited to, the lack of any explanation of whether such compensation should be net of market revenues, lack of assurance that a unit is actually needed to serve load, and lack of cost controls imposed by the scrutiny of proper cost-based ratemaking.

III. PJM is reliable and will remain so for the foreseeable future.

As with the Proposed Grid Resiliency Rule, FirstEnergy’s request relies on unfounded claims that planned retirements of existing generating units threaten the “resiliency” of the PJM system. As Sierra Club and other Public Interest Organizations explained in their initial and reply comments on the Proposed Rule, and as FERC found in rejecting the Proposed Rule, there is no evidence that such generating unit retirements threaten the reliability or resiliency of the system.⁹ Instead, as PJM recently explained in response to questions from the U.S. Senate

PJM does not believe that operating outside of the market to preserve a particular class or type of generation is needed at this time for reliability. The markets have been resilient in attracting new investment. In addition, a variety of tools exist as a backstop should specific generation be needed in a particular area.¹⁰

Nothing in FirstEnergy’s request supports a different conclusion here.

Given that FirstEnergy’s thin support for its request closely resembles that presented to initiate FERC’s consideration of the Grid Resiliency Pricing Rule, Sierra Club refers the Department to the extensive record created in that case, in particular, the comments of Public Interest Organizations, cited above, and those of PJM Interconnection, which provide a detailed rebuttal of the arguments presented

⁹ January 8, 2018 FERC Order in Docket Nos. RM18-1-100 and AD18-7-000.

¹⁰ U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 1 from Sen. Lisa Murkowski (Jan. 23, 2018).

by FirstEnergy in its Request.¹¹ We write here to briefly address two of the more egregious arguments posited in FirstEnergy's request—FirstEnergy's claims that the 2014 Polar Vortex and the recent Bomb Cyclone somehow demonstrate the resiliency value of the aging coal and nuclear units in PJM.

1. The Polar Vortex does not justify FirstEnergy's request for DOE to prop up uneconomic coal and nuclear units in PJM.

FirstEnergy's continued misrepresentation of the events of the 2014 Polar Vortex is especially galling. Request 5, 9, 17. Indeed, while FirstEnergy claims that the Polar Vortex established the necessity of its coal and nuclear units, the Polar Vortex actually showed that on-site fuel storage does not ensure enhanced resiliency.

Of the 35,000 MW of generation capacity that failed to respond, nationwide, during the Polar Vortex, 26 percent was coal and 5 percent was nuclear. DOE Staff Report at 98. And while a significant amount of natural gas capacity also experienced outages, the majority of those outages related to frozen equipment, *not* fuel supply issues.¹² Within PJM, only a quarter of the record high 22% forced outage rate on January 7, 2014, was the result of fuel supply issues.¹³ Far more significant were other causes such as faulty plant maintenance and weather-related damage.¹⁴ PJM's subsequent analysis of the Polar Vortex also highlighted that two resources not reliant on fuel—wind energy and demand—overperformed during that time period.¹⁵

¹¹ Initial Comments of PJM Interconnection, L.L.C. on the United States Department of Energy Proposed Rule.

¹² NERC Polar Vortex Review, at 2, 13 (2014), available at http://www.nerc.com/pa/rrm/January%202014%20Polar%20Vortex%20Review/Polar_Vortex_Review_29_Sept_2014_Final.pdf.

¹³ PJM, Analysis of Operational Events and Market Impacts During the January 2014 Cold Weather Events at 25 (May 8, 2014), available at <http://www.pjm.com/~media/library/reports-notice/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-cold-weather-events.ashx> (hereinafter "PJM Jan. 2014 Cold Weather Events").

¹⁴ *Id.*

¹⁵ *Id.* at 19-21 (May 8, 2014). FirstEnergy repeatedly states that 9300 MW of gas generation was unavailable during the Polar Vortex. Request 5, 17. This claim is based on the isolated fact during one hour of the Polar Vortex, 9,300 MW of generation was unavailable due to interruptions in the natural gas supply. PJM Jan. 2014 Cold Weather Events at 26. FirstEnergy fails to mention, however, that the amount of coal that experienced outages at that same time was 13,700 MW. *Id.*

FirstEnergy ignores the fact that, although fossil-fueled generators failed to perform at a significant rate during the Polar Vortex, PJM successfully managed the threat without having to resort to blackouts, and “even on the day with the tightest power supplies – January 7 – *several steps remained before electricity interruptions might have been necessary.*”¹⁶ This is in large part because PJM, like each RTO, provides for a planning reserve margin precisely to ensure reliability in the event that many supply resources are impacted at the same time, as occurred during the Polar Vortex.

And FirstEnergy also fails to acknowledge the significance of the reforms carried out after the Polar Vortex, which aimed to address the high generator outage rates during the event. In response to the Polar Vortex, FERC held a technical conference focused on the impacts of the Polar Vortex and actions to respond.¹⁷ In November 2014, FERC issued an order to initiate a review of how each RTO was addressing “fuel assurances,” a “broad concept” intending to encompass “a range of generator-specific and system-wide issues, including the overall ability of an RTO’s/ISO’s portfolio of resources to access sufficient fuel to meet system needs and maintain reliability.”¹⁸ Each affected RTO responded to this directive, and ultimately adopted a series of reforms intended to address winter performance concerns. For example, PJM implemented a series of common-sense nonmarket reforms to improve generators’ preparedness for winter conditions.¹⁹ In the very next winter, despite even higher peak winter loads, PJM saw much lower forced outage rates than during the Polar Vortex, and improved performance among generators that had participated in pre-winter operational testing—one of the reforms PJM put in place following the Polar Vortex.²⁰ In addition, both PJM and ISO-NE modified their capacity market rules so as to ensure supplier performance during scarcity conditions.²¹

¹⁶ PJM Jan. 2014 Cold Weather Events at 4.

¹⁷ Notice of Technical Conference, “Winter 2013-2014 Operations and Market Performance in Regional Transmission Organizations and Independent System Operators” AD14-8 (February 21, 2014).

¹⁸ Order on Technical Conferences, 149 FERC ¶ 61,145 (Nov. 20, 2014).

¹⁹ See Protest of Public Interest Organizations, FERC Docket No. ER15-623-000, at Appendix B (summarizing PJM’s extensive measures to improve generator preparedness).

²⁰ See PJM Interconnection, 2015 Winter Report (May 13, 2015), at <http://www.pjm.com/-/media/library/reports-notices/weather-related/20150513-2015-winter-report.ashx?la=en>, at 5-6.

²¹ See Order on Proposed Tariff Revisions, 151 FERC ¶ 61,208 (2015); Order on Tariff Filing and Instituting Section 206 Proceeding, 147 FERC ¶ 61,172 (2014).

While FirstEnergy suggests that the Capacity Performance program somehow “failed” because it did not spur the development of new gas supply contracts,

Finally, FirstEnergy's Request would support a fleet of merchant coal units that, in fact, *performed quite poorly* during the Polar Vortex.²² Analysis by Synergy Energy Economics of hourly generation data reveals that, after initially ramping up to meet growing demand, the coal fleet's performance began to decline even before the peak hour on January 6, 2014.²³ By PJM's winter peak on the evening of the 7th, coal output had fallen by more than 2,500 MW relative to its peak from the prior day.²⁴ Even among units that remained online, most coal units provided less output at the season peak than they had the previous day.

2. The recent Bomb Cyclone weather event and resulting NETL Report do not justify FirstEnergy's request for DOE to prop up uneconomic coal and nuclear units in PJM.

In an apparent effort to distinguish its request from the rejected Proposed Rule, FirstEnergy relies heavily on a recently released National Energy Technology Laboratory report ("NETL Report") that purports to find that coal-fired generating units were critical to preserving "resiliency" in PJM and other RTOs/ISOs during the "Bomb Cyclone" winter event in late December to early January.²⁵ The NETL Report's claim about the resiliency of existing coal units in PJM is based on the fact that during the Bomb Cyclone, coal generation increased more in comparison to the level of generation from December 1 through 26, 2017 than did other forms of generation. FirstEnergy extrapolates from the report that the impacts of the Bomb Cyclone show that "immediate action" to prop up uneconomic coal and nuclear units is "critical."²⁶

FirstEnergy's reliance on the NETL Report is unavailing because that report does not actually measure resilience in PJM. Instead, as Michael Goggin at Grid

Request 11, the company does not address whether that program has, in fact, increased reliability and resiliency of the grid by incentivizing many coal and gas units to weatherize and improve their preparedness for winter events.

²² Public Interest Organization Initial Comments, RM18-1-000, Appendix E, at E-15.

²³ *Id.*

²⁴ *Id.*

²⁵ FirstEnergy Request at 3-8, citing National Energy Technology Laboratory, Reliability, Resilience, and the Coming Wave of Retiring Baseload Units Volume I: The Critical Role of Thermal Units During Extreme Weather Events (Mar. 13, 2018) ("NETL Report"), available at <https://www.netl.doe.gov/research/energy-analysis/search-publications/vuedetails?id=2594>

²⁶ FirstEnergy Request at 3.

Strategies LLC has explained,²⁷ “the report employs a flawed metric of resilience that does not indicate the performance of different types of generators, but instead simply finds which energy sources are the most expensive.” In particular, coal generation was able to increase significantly during the Bomb Cyclone only because those coal units were too costly to operate earlier in December and, therefore, were either idle or only partially utilized. The fact that those idle or partially utilized coal plants increased their generation during the Bomb Cyclone shows only that those coal generators are uncompetitive unless electricity and gas prices increase significantly. Nothing in the NETL Report shows that such increased generation, or the substantially increased costs that it would entail, are necessary to ensure the resiliency or reliability of the PJM system. All bulk electric systems will have some generation that is more expensive and is therefore used primarily during peak load conditions. In PJM’s current generation portfolio many merchant coal plants function (inefficiently) as peaking units, but when those units retire others will take their place as PJM always procures enough generation capacity to meet its reserve margin requirement. In fact, PJM is currently oversupplied and has substantially more generating capacity than it needs.

The NETL Report is unhelpful to FirstEnergy’s effort to take advantage of the Bomb Cyclone because the report fundamentally misses the point. As Michael Goggin explains:

A true examination of resilience would assess actual performance in keeping the lights on for customers. Such an effort should focus on the transmission and distribution system failures that cause the vast majority of customer outages. Such an analysis would also include a range of threats to the power system.

Neither the NETL Report or FirstEnergy’s request provide such an analysis. Instead, they rely on a simplistic assessment that shows that many coal units in PJM are expensive, but fails to support FirstEnergy’s claim that they are critically needed.

In an effort to bolster its case, FirstEnergy seizes on a statement in the NETL Report that demand in PJM “could not have been met without coal” to claim that propping up coal units that are planning to retire by 2025 is necessary.²⁸ But that claim in the NETL Report, which focuses on capacity rather than generation, is meaningless because it relies on the unrealistic assumption that no other capacity

²⁷ Michael Goggin, Fossil Lab Misses Mark in Cold Weather “Resilience” Report, (Mar. 28, 2018), available at <http://sustainableferc.org/fossil-lab-misses-mark-in-cold-weather-resilience-report/>.

²⁸ FirstEnergy Request at 4, citing NETL Report at 17.

would replace the retiring coal.²⁹ In reality, substantial amounts of new generation has come online as coal units have retired over the past eight years, as PJM recently detailed:

On the resource side, it should be noted that although PJM saw about 22,000 MW of coal units retire since 2010, the capacity market attracted more than 37,000 MW of new generation since 2007, of which more than 21,000 MW of new generation was placed in service between 2010 and 2017. This has resulted in a current PJM reserve margin of 29.1 percent, which is well above the targeted reserve margin of 16.6 percent for 2017 and 16.1 percent for 2018.³⁰

There is no reason to believe that future coal and nuclear unit retirements that may occur by 2025 would not similarly be met with new resources, including renewables, demand response, and energy storage.

Echoing the NETL Report, FirstEnergy proclaims serious concerns about the fact that many of the coal units that dispatched during the Bomb Cyclone are expected to retire in the coming years.³¹ In support, FirstEnergy notes that PJM's President has recently testified that 1,410 MWs of nuclear generation and 3,688 MWs of coal generation that operated during the Bomb Cyclone is scheduled to retire in the next five years.³² The Company neglects to mention, however, that PJM went on to explain that those retiring coal units had a significantly higher forced outage rate (ranging from 16% to 31.7%) during the Bomb Cyclone than the 8% to 11.7% forced outage rate for the non-retiring coal units during that same time.³³ In other words, on the metric that FirstEnergy claims to be concerned

²⁹ NETL Report at 17 (noting that "any retiring units that were dispatched during the event would have to be replaced.").

³⁰ U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 1 from Sen. Lisa Murkowski (Jan. 23, 2018).

³¹ FirstEnergy Request at 7.

³² FirstEnergy Request at 7, citing U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Mike Lee (Jan. 23, 2018).

³³ U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Mike Lee (Jan. 23, 2018).

about—performance during extreme weather events—the coal units that the company wants to force customers to prop up fail.³⁴

Ultimately, FirstEnergy’s attempt to use the Bomb Cyclone as an excuse to bail out its coal and nuclear plants fails because the PJM systems performance during that weather event shows that there is no looming resiliency crisis. In fact, PJM itself found that:

During the recent cold snap, PJM did not call a performance assessment interval, a 72-hour maintenance recall or any transient shortage intervals. However, the system was well tested and, as detailed in this report, there were indicators of improved performance of generating resources since 2014. Overall, the grid and the generation fleet performed well. Even during peak demand, PJM had excess reserves and capacity.³⁵

The available evidence plainly shows that in a time of major changes to the energy mix in our country, PJM is ensuring system reliability and the resilience to keep the lights on even during significant weather events such as the Bomb Cyclone. No basis has been provided for disrupting that system with substantial sums of out-of-market payments that would help prop up some of the oldest and least reliable coal units in the system while filling the coffers of the merchant generating companies that own those units.

³⁴ PJM also noted that it “does not see any challenge to reliability or fuel diversity from the announced retirements.” U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Mike Lee (Jan. 23, 2018).

³⁵ PJM INTERCONNECTION, PJM COLD SNAP PERFORMANCE DEC. 28, 2017 TO JAN. 7, 2018 (Feb. 26, 2018), available at <http://www.pjm.com/-/media/library/reports-notices/weather-related/20180226-january-2018-cold-weather-event-report.ashx>. PJM has also noted that it had 5,400 MWs of emergency demand response available during the Bomb Cyclone that it did not end up needing to utilize. U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Lisa Murkowski (Jan. 23, 2018).

IV. CONCLUSION

For the foregoing reasons, Sierra Club asks the Department of Energy to promptly deny the request of FirstEnergy Solutions.

Sincerely,

/s/ Casey Roberts

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cc:

Bruce Walker
Assistant Secretary, DOE Office of Elec. Delivery & Energy Reliability
Office of Electric Reliability and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, D.C. 20585

Patricia A. Hoffman
Principal Deputy Assistant Secretary, DOE Office of Elec. Deliver & Energy Reliability
Office of Electric Reliability and Energy Reliability

U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, D.C. 20585

Rick C. Giannantonio
General Counsel
FirstEnergy Solutions Corp.
76 South Main Street
Akron, OH 44308

Craig Glazer
VP, Federal Government Policy
PJM Interconnection, L.L.C.
1200 G St., N.W., Ste. 600
Washington, D.C. 20005

CERTIFICATE OF SERVICE

I hereby certify that, to the best of my knowledge, I have this 10th day of April 2018 served the foregoing upon each person designated for service in this proceeding.

/s/ Casey Roberts
Casey Roberts



Tishekia E. Williams
Assistant General Counsel, Regulatory

411 Seventh Avenue
Mail drop 15-7
Pittsburgh, PA 15219

Tel: 412-393-1541
Fax: 412-393-5757
twilliams@duqlight.com

Document 41

April 11, 2018

VIA OVERNIGHT MAIL AND EMAIL

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Bruce Walker
Assistant Secretary,
U.S. Department of Energy
Office of Electric Delivery and Energy Reliability
1000 Independence Avenue, S.W.
Washington, DC 20585

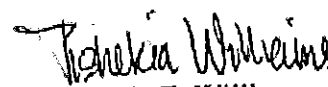
Catherine Jereza
Deputy Assistant Secretary
U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: **First Energy Solutions Corp. March 29, 2018 Request for Emergency Order
Duquesne Light Company's Motion to Intervene**

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Enclosed is Duquesne Light Company's Motion to Intervene in the above proceeding of First Energy Solutions Corp.'s Request For Emergency Action. Should you have any questions please feel free to contact me

Respectfully Submitted,


Tishekia E. Williams *kw*
Attorney ID#208997

Enclosure

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

**Request for Emergency Order Pursuant to :
Federal Power Act Section 202(c) By :
FirstEnergy Solutions Corp. :** **Docket No. _____**

**DUQUESNE LIGHT COMPANY'S
MOTION TO INTERVENE**

Pursuant to the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("FERC") 10 C.F.R. § 205.374, Duquesne Light Company ("Duquesne Light") hereby moves to intervene in FirstEnergy Solutions Corp.'s ("FirstEnergy") application to the Secretary of Energy, Mr. James Richard Perry, ("Secretary") for an emergency order under Section 202(c) of the Federal Power Act. Duquesne Light received notification of FirstEnergy's application on April 9, 2018 and files this response within three (3) days of receipt as required by 10 C.F.R. § 205.374. Duquesne Light respectfully seeks to intervene in the above-referenced proceeding for the following reasons:

Duquesne Light is a public utility as the term is defined under Section 102 of the Public Utility Code, 66 Pa.C.S. § 102 and certificated by the Commission to provide electric distribution service for more than 580,000 Pennsylvania customers in portions of Allegheny and Beaver counties. Duquesne Light is also an electric distribution company ("EDC") and a default service provider as defined under Section 2803 of the Public Utility Code. 66 Pa.C.S. § 2803. Duquesne Light's transmission facilities are presently operated subject to the functional control of PJM Interconnection, L.L.C. ("PJM"). As a fellow PJM market participant with FirstEnergy, Duquesne Light has a direct and substantial interest in the outcome of this proceeding and its interests cannot be adequately represented by any other party. Duquesne Light anticipates FirstEnergy's application, if rejected, may have an impact on Duquesne Light's ability to supply its customers with reliable and uninterrupted service. It is therefore appropriate and in the public interest that Duquesne Light be permitted to intervene in this proceeding and participate with full rights as a party. Duquesne Light requests that interested parties have 60 days to file comments and/or provide relevant analysis.

Respectfully Submitted,

**By: /s/ Tishekia Williams _____
Assistant General Counsel, Regulatory**

Duquesne Light Company
411 Seventh Avenue, 15th Fl.
Pittsburgh, PA 15219
Phone: 412-32932-1541
E-mail: Twilliams@duqlight.com

Dated: April 11, 2018

Standley, Erica

From: IP_LonnieStephenson <IP_LonnieStephenson@IBEW.org>
Sent: Wednesday, April 11, 2018 1:42 PM
To: Secretary Perry
Subject: Federal Power Act, Section 202(c)
Attachments: Federal Power Act, Section 202(c).pdf

10 APR 11 PM 3:50

Dear Secretary Perry:

Attached please find my letter regarding Section 202(c) of the FPA.

Sincerely yours,

Lonnie R. Stephenson
IBEW International President



**INTERNATIONAL
BROTHERHOOD
OF ELECTRICAL
WORKERS**

900 Seventh Street, NW
Washington, DC 20001
202.833.7000
www.ibew.org

LONNIE R. STEPHENSON
International President

KENNETH W. COOPER
International
Secretary-Treasurer

April 11, 2018

VIA EMAIL

The Honorable Rick Perry
Secretary of the U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: Federal Power Act, Section 202 (c)

Dear Secretary Perry:

On behalf of the 775,000 active members and retirees of the International Brotherhood of Electrical Workers (IBEW), I write to encourage the Department of Energy to exercise their authority under the Federal Power Act, 202 (c) to provide emergency cost recovery for baseload generation units that provide grid reliability and resiliency to the electric grid. Many of the baseload generation units that provide grid stability and reduce voltage fluctuations will be impacted by the forced early retirement of these units.

The IBEW represents workers employed in a variety of fields directly and indirectly related to power generation and the electric grid. Our experience spans over 125 years. We are the best trained, most professional workforce in the electrical industry.

Electrical grid voltage must be maintained 24 hours a day, seven days a week. The grid must balance consumption and production at all times; any significant imbalance could cause grid instability or severe voltage fluctuations, and cause failures within the grid. While other sources of energy provide electrical energy they simply do not provide the same type of security and resiliency that baseload power plants do. That is because these baseload units have on-site fuel supplies to ensure these plants can withstand disturbances such as severe weather, interruptible fuel contracts, attacks on infrastructure, or other catastrophic events that upset fuel delivery.

Baseload generation provided the most resilient form of generation during the most recent cold spell in the northeast (Bomb Cyclone), according to the DOE's National Energy Technology Laboratory (NETL) report analyzing the resilience of different electricity resources. The reliability and resiliency provided by baseload generation does come with a price and maintaining this reliability will require an emergency order on behalf of the Department of Energy.





INTERNATIONAL
BROTHERHOOD
OF ELECTRICAL
WORKERS®

The Honorable Rick Perry
April 11, 2018
Page 2

This emergency order under the FPA, Section 202 (c) is necessary to assure that when a customer expects the grid to provide reliable power for their business or home the local utility can provide that service 24 hours a day and 7 days a week. On behalf of the IBEW, I encourage the Department of Energy to move forward with an emergency order to provide cost recovery to the baseload generation units providing that service.

Sincerely yours,

A handwritten signature in cursive script that reads "Lonnie R. Stephenson".

Lonnie R. Stephenson
International President

LRS:kab

MARIA KORSNICK

President and Chief Executive Officer

1201 F Street NW, Suite 1100

Washington, DC 20004

P: 202.739.8187

mgk@nei.org

nei.org



NUCLEAR ENERGY INSTITUTE

Document 43

April 11, 2018

The Honorable Rick Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Mr. Secretary:

Our nation's nuclear power plants deliver benefits that go far beyond a reliable and resilient electrical grid. Nuclear energy contributes to a strong economy, a cleaner environment, and national security. Yet today we are at risk of losing much of what nuclear energy delivers.

FirstEnergy Solutions has announced plans to shut down several electricity generation facilities, including four nuclear reactors at three sites – two reactors each in Ohio and Pennsylvania.¹ These four reactors join eight others that have already announced plans to shut down, and another six that have permanently closed over the past five years. The announcement of these additional nuclear retirements is further proof that the industry has reached an inflection point in the debate over market reforms to recognize the value of the nation's largest and most resilient source of emissions-free energy. The simple fact is that nuclear energy's many benefits are not being recognized by the markets in which they operate. We are therefore writing to request that immediate action be taken to prevent the closure of these four nuclear power reactors and to more fully recognize the benefits that nuclear energy delivers to our nation.

As demonstrated by the recent announcement that Exelon's Three Mile Island reactor will prematurely shut down in September 2019², once a deactivation decision is made, the plant owner ceases investment in capital investments, including fuel. Moreover, refueling outages must be planned a year in advance. Thus, in the case of TMI and the FirstEnergy Solutions plants, without urgent action, it will be too late to reverse these decisions and allow for continued operation.

Nuclear energy accounts for nearly 20 percent of the electricity generated in the United States. And regardless of what you value in our electricity system, nuclear energy delivers. Our nation's 99 nuclear power reactors have an unmatched combination of attributes that are central to a clean, modern electrical grid, but that are under-valued or not valued at all in most electricity markets.

For example, if you value system resilience and low electricity prices, you should value that nuclear plants operate around the clock for up to two years between refuelings, providing valuable fuel security,

¹ See <https://www.fes.com/content/fes/home/restructuring.html>

² <http://www.exeloncorp.com/newsroom/exelon-to-retire-three-mile-island-generating-station-in-2019>

NUCLEAR. CLEAN AIR ENERGY

reliability and price stability to our electricity markets. Losing these and other nuclear power reactors would imperil the resilience of the grid and drive up costs to consumers. A recent Department of Energy study³ showed the PJM electricity system was heavily reliant on these and other economically challenged plants to provide generation during the bomb cyclone event this winter. Even with these plants helping to provide power, electricity prices soared above \$200 per megawatt hour as natural gas prices spiked. Managing severe cold weather events without these nuclear plants will be costlier as the system becomes increasingly dependent on generation that depends on “just-in-time” fuel deliveries and lacks firm fuel supply capabilities.

In addition, multiple studies have made clear that when nuclear plants shut down, electricity prices rise – even under normal weather conditions. For example, the Brattle Group⁴ found that New York would save customers a billion dollars a year by acting to preserve nuclear plants. Providing financial support for nuclear power plants facing premature closure decisions will cost consumers far less than any of the alternatives.

If you value clean electricity generation, you should value nuclear energy as our nation’s single-largest source of carbon-free generation, representing nearly 60 percent of all zero-carbon electricity. In addition, nuclear energy generation emits no sulfur dioxide, nitrogen oxides, mercury, and particulate emissions. The four nuclear reactors announced for closure generated more non-emitting electricity last year than all of the wind and all of the solar produced in PJM combined. If these reactors close, carbon emissions will increase over 20 million metric tons, the equivalent of putting over 4 million additional cars on the road. It simply won’t be feasible to replace all or even most of the lost clean energy generation with renewables; the increased fossil fuel generation that would replace the lost nuclear generation would wipe out more than 25 years of progress toward a cleaner electricity system.

If you value national security and global influence, you should be concerned that the U.S. leads the world in nuclear energy generation, but has seen its civil nuclear leadership erode as Russia and China have captured an increasing share of the global market.⁵ For several decades, our strong domestic nuclear industry has helped the U.S. enforce the world’s highest standards for nuclear safety and nonproliferation. American influence is strengthened through the century-long relationships built when the U.S. engages in nuclear commerce with another nation, and other nations seek us out as commercial partners in part because we operate the safest and most efficient nuclear power plants in the world. Unfortunately, other nations will be increasingly less likely to look to the U.S. for nuclear products and services if we let our operating nuclear fleet continue to shrink.⁶

And finally, if you value well-paying, long-term jobs, you should know that losing these and other reactors would have dire consequences for the communities that host the plants. For example, closure would mean the loss of over 3,000 full-time jobs for the Ohio and Pennsylvania employees who work at the four plants, as well as thousands more jobs in the surrounding communities that are supported by their economic activity. This translates into the loss of millions of dollars in taxes and negative impacts

³ <https://www.netl.doe.gov/research/energy-analysis/search-publications/vuedetails?id=2594>

⁴ [http://files.brattle.com/system/news/pdfs/000/001/046/original/comments_on_the_new_york_dps_\(2\).pdf](http://files.brattle.com/system/news/pdfs/000/001/046/original/comments_on_the_new_york_dps_(2).pdf)

⁵ <https://static1.squarespace.com/static/58ec123cb3db2bd94e057628/t/59947949f43b55af66b0684b/1502902604749/EFI+nuclear+paper+17+Aug+2017.pdf>

⁶ https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/130719_Wallace_RestoringUSLeadershipNuclearEnergy_WEB.pdf

The Honorable Rick Perry
April 11, 2018
Page 3

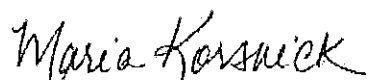
to the GDP of each state. The economic hardships faced by other communities where nuclear plants have already shut down should both alarm and motivate state and national leaders to act.

The announcement by FirstEnergy Solutions demonstrates the urgency for federal policymakers to act in markets where nuclear energy is undervalued. All appropriate options should be explored to prevent the premature closure of nuclear plants and preserve the nuclear energy option. It is past time for the federal government to ensure proper valuation of nuclear energy's many attributes in electricity markets and to take other measures to preserve nuclear energy for our nation's future.

As the trade association for the nation's largest source of emissions-free energy, NEI urges policymakers to pursue long-term sustainable reforms to market rules that will correct widely acknowledged flaws that unfairly disadvantage nuclear plants, without interfering with state planning processes and regions (such as MISO) where federal markets are functioning. We have advocated in prior comments to FERC for "cost-of-service compensation for nuclear generation units, at least until other market structures are put in place that appropriately value the resiliency attributes that nuclear generation units provide."⁷ Accordingly, a Section 202(c) remedy for nuclear resources that are facing premature retirement can provide a necessary bridge before longer-term reforms can be enacted. In developing longer-term reforms, federal policymakers should consider narrowly tailored action, including supportive tax policies (including expanded production tax credits and investment tax credits), inclusion of nuclear energy in federal energy procurement goals and mandates, market design changes that allow all resources to set price, and recognition of nuclear energy's non-emitting attributes consistent with recognition provided to other non-emitting resources. The policy tools discussed above have long been used to support other components of our nation's "all of the above" energy portfolio; policymakers should now do the same for nuclear energy. And when considering these policies, we encourage you to work closely with states and FERC to ensure that any federal proposal makes sense for energy producers and consumers throughout the nation.

There is still time for policymakers to act. Leaders in New York and Illinois crafted solutions that recognize the contribution the states' nuclear plants make to maintaining clean air for their citizenry. The state of Connecticut has also acted to level the playing field for all sources of clean energy, including nuclear, to support the state's electricity needs. Federal policymakers should avoid interfering with these state programs which, like renewable portfolio standards, protect a valuable state interest in protecting the environment. But while state policy actions have been essential in preserving nuclear assets, it is imperative that federal policymakers assure federal policies appropriately value nuclear energy's attributes, to ensure it continues making important contributions to America's energy, environmental, national security and economic interests.

Sincerely yours,



Maria Korsnick

⁷ <https://www.nei.org/resources/letters-filings-comments/nei-comments-ferc-grid-resiliency-rulemaking>



1101 K Street NW, Suite 700 | Washington DC 20005-4210 | Voice: 202.682.1390 | Email: jhughes@elcon.org

John P. Hughes
President & Chief Executive Officer

April 12, 2018

The President
The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20500

Re: U.S. Manufacturers Urge Denial of the Request for Emergency Order Filed by FirstEnergy Solutions Corp.
under Section 202(c) of the Federal Power Act

Dear Mr. President:

ELCON, the national association of large industrial consumers of electricity, respectfully requests that the Administration reject FirstEnergy's Section 202(c) request and decline to take other federal action to interfere with retiring power plants. Such action would be unnecessarily anti-competitive and would increase the price of electricity to businesses and consumers, resulting in a substantial loss of U.S. manufacturing capacity and jobs. No one has a greater interest in reliable electricity supply than the industrial consumers whose operations depend on it, but there is no emergency that requires federal response.

The historically low electricity prices that have resulted from the markets' operation have substantially benefited the competitiveness of U.S. manufacturers, benefits that would be lost if they were forced to pay billions in additional payments to the owners of uneconomic coal and nuclear power plants. The retirement of uneconomic plants represents a normal, efficient functioning of competitive markets and has been ongoing for decades. In fact no market operator has requested federal action on behalf of closing plants, even when they acknowledge, such as PJM, that diversity in electricity sources merits further attention.

The circumstances that would trigger Section 202(c) or other federal action simply are not present. A 2017 DOE Staff Report concludes: "while markets have evolved since their introduction, they are currently functioning as designed—to ensure reliability and minimize the short-term costs of wholesale electricity—despite pressures." NERC's CEO stated that "the state of reliability in North America remains strong, and the trend line shows continuing improvement year over year". FERC also relied on "extensive comments" from PJM and other system operators which identified no "past or planned generator retirements that may be a threat to grid resilience." The cost of honoring requests by coal and nuclear interests will be borne by consumers, even though retirements like those with FES are years away and even though the DOE regulations clearly state that "economic factors relating to service . . . generally will not be considered as emergencies unless the inability to supply electric service is imminent."

The government cannot attempt to pick winners and losers and must certainly not treat U.S. manufacturing jobs as inferior to those at uneconomic power plants. Allocation of resources should be left to the competitive markets.

Most Respectfully,

A handwritten signature in black ink, appearing to read "John P. Hughes".

Cc: The Honorable Rick Perry, Secretary of Energy
The Honorable Lawrence Kudlow, Assistant to the President for Economic Policy & NEC Director



1401 New York Avenue, NW
Suite 950
Washington, DC 20005-2100

(202) 628-8200

April 12, 2018

President Donald J. Trump
The White House
Washington, D.C. 20500

Dear Mr. President:

This letter is prompted by the unprecedented and unjustified request for an "emergency order" under Federal Power Act Section 202(c) from FirstEnergy Solutions (FES). The Electric Power Supply Association (EPSA) appreciates that your Administration is taking the time to carefully review this request given the widespread negative ramifications were it to be granted, or other steps taken to disadvantage FES's competitors and the businesses and consumers reliably served by them. There is simply no emergency.

EPSA members are independent power producers that compete with utility-affiliated entities such as FES to generate electricity. The PJM regional grid that would be negatively impacted by the 202(c) request, or other forms of intervention, is the largest in the country and where most EPSA assets are located. EPSA members own far more generation in PJM than FES, primarily through members' coal and natural gas plants.

EPSA joined in a recent filing submitted to the U.S. Department of Energy (DOE) asking for public comment on the FES application and pointing out its legal flaws. EPSA writes to you today because granting the FES request, or providing other forms of assistance to a subset of competitors, is fundamentally at odds with the wise course you have charted for our country. This includes your goals for robust economic growth, improving U.S. competitiveness, and modernizing infrastructure including the power grid.

Electricity is a major input cost for manufacturers, small businesses and households. Under your leadership, U.S. domestic energy is bringing tangible economic benefits through abundant energy supplies at affordable prices. Measures such as 202(c) orders, or other steps to place thumbs on the scale, would needlessly raise electricity costs by billions of dollars annually. This is why DOE has heard from so many who represent the 65 million customers in the PJM region that would be adversely affected.

Since all electricity suppliers face the challenges of current market conditions and the ongoing exciting transformation of how electricity is produced and consumed, federal and state policies should be pursued on a fuel neutral basis to best serve consumers.

Sincerely,

A handwritten signature in black ink, appearing to read "John E. Shelk", written over a horizontal line.

John E. Shelk
President & CEO



April 12, 2018

Via Electronic Mail

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington DC 20585
The.secretary@hq.doe.gov
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Mr. Bruce Walker
Assistant Secretary
Office of Electric Delivery and Energy Reliability
U.S. Department of Energy
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Ms. Catherine Jereza
Deputy Assistant Secretary
Office of Electric Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington DC 20585
Catherine.jereza@hq.doe.gov

**RE: Motion of North Carolina Electric Membership Corporation to Intervene,
Protest and Consultative Comments**

BOSTON

HARTFORD

STAMFORD

NEW YORK

NEWARK

EAST BRUNSWICK

PHILADELPHIA

WILMINGTON

WASHINGTON, DC

Dear Secretary Perry, Assistant Secretary Walker and Deputy Assistant Secretary Jereza:

Attached is North Carolina Electric Membership Corporation's ("NCEMC") Motion to Intervene, Protest and Consultative Comments in the proceeding concerning FirstEnergy Solutions Corporation's Request for Emergency Action Under Section 202(c) of the Federal Power Act. NCEMC is a Generation and Transmission ("G&T") rural electric cooperative, and a participant in the electric markets operated by PJM Interconnection, LLC. It also is a user of critical electric infrastructure within the United States. NCEMC opposes FES' request for emergency action because there is no emergency and no justification for the relief requested. If the Request is not denied outright, the Department should provide all interested parties 60 days to submit comments, as requested by the Electric Power

Letter to Secretary Perry
April 12, 2018
Page 2

Supply Association and other organizations in a request filed on Friday, March 30, 30218.

Sincerely,

/s/Denise C. Goulet
Denise C. Goulet
Sean T. Beeny

Attorneys for North Carolina Electric Membership Corporation

cc: Official Service List

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

Request For Emergency Order)
Pursuant To Federal Power Act Section)
202(c) By FirstEnergy Solutions Corp.) **DOE Docket No. _____**

**MOTION TO INTERVENE, PROTEST AND CONSULTATIVE COMMENTS OF
NORTH CAROLINA ELECTRIC MEMBERSHIP CORPORATION**

The North Carolina Electric Membership Corporation (“NCEMC”), pursuant to Rules 211, 212 and 214 of the Federal Energy Regulatory Commission (“FERC”) Rules of Practice and Procedure, 18 C.F.R. § 211, 212 and 214 (2018), and the United States Department of Energy’s (“the Department”) regulations, 10 C.F.R. §205.383,¹ submits this Motion to Intervene, Protest and Consultative Comments in the above-captioned proceeding. NCEMC protests the March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act Section 202(c) submitted by FirstEnergy Solutions Corporation (“FES”) in this matter.

I. PROCEDURAL BACKGROUND

On March 29, 2018, FES submitted a letter (“Request”) to Energy Secretary James Richard Perry requesting that the Secretary invoke emergency authority under Section 202(c) of the Federal Power Act (“FPA”), 16 U.S.C. § 824a, to find that an emergency condition exists in the PJM Interconnection, LLC (“PJM”) region that requires immediate action by the Department.

¹ Federal Power Act Section 202(c) and the Department’s policy and regulations provide that FERC’s Rules of Practice and Procedure should be used for procedural guidance in Emergency Order proceedings. Guidance published on the Department’s website points to the Commission’s rules in situations where the Department’s regulations at 10 C.F.R. § 205.370, *et. seq.*, are silent. *See, e.g.*, DOE Answer to Procedural Questions Concerning Reharing of DOE Order, *District of Columbia Public Service Commission*, Docket No. E0-05-01 (December 30, 2005) at 2. The plain language of Section 202(c)(5) of the Federal Power Act, enacted in 2016, reinforces this principle. The FES Request is a proceeding under Chapter 12 of the Federal Power Act, and the Commission’s Rules of Practice and Procedure apply. *See* 16 U.S. Code § 825g(b) [FPA Section 308] (“All hearings, investigations, and proceedings under this chapter shall be governed by rules of practice and procedure to be adopted by the Commission.”).

FES requested that the Secretary order PJM to enter into contracts with “certain existing nuclear and coal-fired generators” located in PJM for the supply of energy, capacity, and ancillary services in order to “maintain the stability of the electric grid.”² FES also requests that the Secretary order PJM to “promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide.”³ In the event PJM and the owners of the resources are unable to reach agreement regarding compensation and other contractual terms, FES requests that “the Secretary step in and determine the just and reasonable compensation and conditions.”⁴

II. COMMUNICATIONS

Service should be made upon and communications should be addressed to:

Richard Feathers, Esq.
Senior Vice President and General Counsel
Charlie Bayless, Esq.
Associate General Counsel
North Carolina Electric Membership
Corporation
3400 Sumner Boulevard
Raleigh, NC 27616
(919) 872-0800 (Voice)
(919) 645-3437 (Fax)
E-mail: rick.feathers@ncemcs.com
charlie.bayless@ncemcs.com

Sean T. Beeny, Esq.
Denise C. Goulet, Esq.
McCarter & English, LLP
1015 Fifteenth Street, N.W.
Twelfth Floor
Washington, D.C. 20005
(202) 753-3400 (Voice)
(202) 354-4652 (Fax)
E-mail: sbeeny@mccarter.com
dgoulet@mccarter.com

III. MOTION TO INTERVENE

NCEMC is a generation and transmission cooperative responsible for the full or partial power supply requirements of its 25 members throughout the state of North Carolina. As such, it is a user of critical electric infrastructure within the United States, within the meaning of 10 C.F.R. §205.383 (a)(5). NCEMC’s 25 distribution cooperatives supply electricity to approximately 1 million homes, farms, and businesses in which more than 2.5 million North

² Request at 1.

³ *Id.*

⁴ Request at 31-32.

Carolínians live and work. NCEMC's distribution cooperative loads are located throughout the service areas of three investor-owned public utilities: Duke Energy Carolinas, LLC and Duke Energy Progress, LLC, both subsidiaries of Duke Energy Corporation, and Virginia Electric and Power Company, doing business as Dominion Virginia Power in Virginia and as Dominion North Carolina Power in North Carolina (hereinafter referred to collectively as "Dominion").

NCEMC is a member of PJM, which operates the transmission systems of several electric utilities, including the transmission facilities owned by Dominion. NCEMC purchases transmission services from PJM over Dominion's transmission facilities to serve the loads of its six member cooperatives that distribute power at retail in the Dominion transmission zone of the PJM region. NCEMC also participates in PJM's energy, ancillary services and capacity markets.

The Department's ruling in this matter may have a significant and adverse effect on the rates paid by NCEMC for wholesale supplies it purchases to serve its member distribution cooperatives and their retail consumers in PJM. The cost of the payments envisioned in FES' Request that are to be provided to the coal and nuclear generating facilities in PJM likely would be recovered from load-serving entities in the PJM region, including NCEMC. As a current PJM Member, a transmission customer in PJM's Dominion Zone, and a participant in PJM's capacity, energy and ancillary services markets, NCEMC has an interest that may be directly affected by the outcome of this proceeding. This interest cannot be adequately represented by any other party, and NCEMC's participation in this case is necessary to adequately protect its interests. NCEMC should be permitted to intervene as its participation would serve the public interest.

IV. PROTEST AND CONSULTATIVE COMMENTS

NCEMC opposes FES' Request because there is no emergency in the PJM region, and no justification for the relief requested. If the Department decides not to reject the Request outright,

it should provide an opportunity for the filing of detailed comments by entities that could be affected by the Department's ruling on this matter. NCEMC reserves the right to supplement this preliminary pleading to explain in detail why granting the Request would result in unjust, unreasonable and unduly discriminatory rates for its North Carolina customers.

V. CONCLUSION

For the foregoing reasons, NCEMC requests that it be permitted to intervene and participate in this proceeding as a PJM market participant and a user of critical electric infrastructure within the United States. If the Department does not reject the FES Request outright, The Department should provide interested parties, by notice published in the Federal Register, 60 days to file comments on the Request.

Respectfully submitted,

By: /s/ Denise C. Goulet

Sean T. Beeny
Denise C. Goulet
McCarter & English, LLP
Twelfth Floor
1015 Fifteenth Street, N.W.
Washington, D.C. 20005
(202) 753-3400

Richard Feathers
Senior Vice President and General Counsel
Charlie Bayless
Associate General Counsel
North Carolina Electric Membership Corporation
3400 Sumner Boulevard
Raleigh, North Carolina 27616
(919) 872-0800

Attorneys for
North Carolina Electric Membership Corporation

DATED: April 12, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document by first-class mail, electronic means, or hand delivery, upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. on this 12th day of April, 2018.

By: /s/ Denise C. Goulet

Denise C. Goulet
McCarter & English, LLP
1015 Fifteenth Street, N.W.
Twelfth Floor
Washington, D.C. 20005
(202) 753-3400

Troy, Angela (CONTR)

From: Julie Wilson <jwilson@local310.com>
Sent: Friday, April 13, 2018 10:20 AM
To: AskOE
Subject: Federal Power Act Section 202 (c)
Attachments: Fed Enrgy Reg Comm Ltr 10 16 2017.pdf

Good Morning – In the past we have sent you a letter expressing our concern for the ongoing need to support the cost of nuclear and coal-fired units (see attachment). We further believe that an emergency order pursuant to Federal Power Act Section 202 (c) is necessary to secure this reliable power source. Thank You.

Terence P. Joyce
Business Manager
Building Laborers' Local 310
3250 Euclid Ave.
Cleveland, OH 44115
216 881-5901
tjoyce@local310.com



BUILDING LABORERS' UNION, LOCAL No. 310

Affiliated with Laborers' International Union of North America – AFL-CIO

3250 EUCLID AVENUE • CLEVELAND, OHIO 44115-2599

PHONE: 216/881-5901 • FAX: 216/881-5928

TERENCE P. JOYCE, *Business Manager*

MICHAEL J. KEARNEY, *Secretary-Treasurer*

October 16, 2017

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

Re: Grid Resiliency Pricing Rule
FERC Docket No. RM18-1-000

COMMENTS OF THE BUILDING LABORERS' LOCAL 310 IN SUPPORT OF THE PROPOSED RESILIENCY RULE

On September 28, 2017, the Department of Energy ("DOE") issued the "Grid Resiliency Pricing Rule" (the "Proposal") directing the Federal Energy Regulatory Commission ("FERC") to adopt a rule requiring operators of organized markets to "ensure that certain reliability and resiliency attributes of electric generation sources are fully valued." Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in Ohio will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

The Building Laborers' Local 310 strongly supports the Proposal and shares the Secretary's urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members' loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC has the requisite basis to act now. There is no



time for delay. In addition to acting promptly, FERC should also direct organized market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Terence P. Joyce
Business Manager
Building Laborers' Local 310
3250 Euclid Ave., Cleveland, OH 44115
216 881-5901
tjoyce@local310.com

II. DESCRIPTION OF BUILDING LABORERS' LOCAL 310

Labor Union – Building Construction

III. DESCRIPTION OF BUILDING LABORERS' LOCAL 310'S INTEREST IN PROCEEDING

The Building Laborers' Local 310 is a party to a collective bargaining agreement with the owners of baseload coal and nuclear power plants located in Cuyahoga, Lake and Geauga Counties of Ohio. Our members work on major infrastructure and industrial development projects that are dependent on the continued operation of the baseload coal and nuclear power plants. As a result, the wages, terms and conditions of employment of its members may be directly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, the Building Laborers' Local 310 members have a direct and substantial interest in this proceeding. As well, the unique perspective of the Building Laborers' Local 310 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in Ohio electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across Ohio. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in Ohio provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to Building Laborers' Local 310 members.

Building Laborers' Local #310 sends workers to both the Davis-Besse and Perry Nuclear Power Plants. These Power Plants employ approximately 1,400 people. These Power Plants have a temporary shutdown every 24 months in order to replace some of their fuel and to conduct routine maintenance and safety inspections. These outages can last anywhere from four to six weeks and requires the Power Plants to hire additional contract workers which includes members of Building Laborers' Local 310. This highly skilled workforce requires boilermakers, electricians, iron workers, pipefitters and various other craft personnel to work around the clock to complete the work safely and efficiently. These jobs with overtime, pay wages far above the prevailing incomes of their respective communities. Also, in total, outside contractors, workers and plant personnel contribute nearly \$25 million combined each year in state and local taxes to support schools, police and fire departments and other vital public services. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive economy in two ways. First, the preservation of certain plants will avoid the need to replace lost generation with

imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed, reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled (and specifically trained and experienced) employees, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

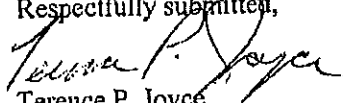
Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in Ohio, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, the Building Laborers' Local 310 strongly urges FERC to adopt the rule proposed by the DOE as promptly and comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by the comments considered in this proceeding. FERC has thoroughly considered the impact of electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the

time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of pre-mature closures.

In acting promptly, FERC should also direct the organized market operators to issue a rule that is not only compensatory (and based on the regulatory language of the Proposal) but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

Respectfully submitted,



Terence P. Joyce
Business Manager
Building Laborers' Local 310

Troy, Angela (CONTR)

From: Larry Tscherne <larry@ibew245.com>
Sent: Friday, April 13, 2018 11:11 AM
To: AskOE
Subject: Section 202(c)
Attachments: May 2017 IBEW Local 245.pdf; IBEW 245.pdf

For your convenience, I have attached a letter dated May 12, 2017 addressed to Secretary Perry and a letter dated October 16, 2017 addressed to the Federal Energy Regulatory Commission expressing our concerns on the importance of baseloaded generation. As you are aware once these plants are closed they are closed for good. The dedicated highly skilled workforce, the lifeblood of their communities will also be gone along with the strong tax base they provide.

It is my belief you will be receiving comments from many interests outside of the communities these plants support. Interests that will not have to worry about the crippling effect of the loss of highly skilled and good paying jobs.

Thank you in advance for taking the time to review my letters.

Larry J. Tscherne
Business Manager/Financial Secretary
IBEW Local 245
705 Lime City Rd.
Rossford, Ohio 43460

419-666-3350
419-666-5545 (Fax)

Phone: (419) 666-3350
(888) 666-3350
Fax: (419) 666-5545



AFL-CIO

International Brotherhood of Electrical Workers

LOCAL UNION No. 245

705 LIME CITY ROAD

ROSSFORD, OHIO 43460

May 12, 2017

Dear Secretary Perry,

Unions, labor and power plant workers across the country applaud the Department of Energy's study examining electricity markets, the value of baseload power and the long-term security and resiliency of the electric grid. Baseload coal and nuclear power plants employ more than 154,000 workers, produce major infrastructure projects that put Americans to work, and support a resilient electric grid.

Baseload power plants have long been the "work horses" of the electric system, providing energy to customers 24 hours a day, 365 days a year. With significant on-site fuel reserves, they provide the resiliency required to keep electricity flowing under all circumstances since their operation is not subject to interruption by extreme events such as weather or attacks on infrastructure that disrupt fuel delivery to other generation resources. Recently, EPA Administrator Pruitt noted as much when he talked about the consequences of an attack on key infrastructure. Our nation's security is dependent on maintaining these plants to support a resilient supply of electricity.

However, numerous baseload power plants have permanently shut down in recent years, and many more are expected to close prematurely in the very near future. Once they are gone, they are gone for good. Baseload generation is under serious threat from market-distorting subsidies and mandates, regulations that target these resources, low natural gas prices and markets that don't value resiliency. We are at a crisis point. Further decline in the number of plants will not only impact the grid and national security, it will cost valuable jobs and discourage industrial development opportunities nationwide. This is an outcome America simply can't afford.

Our baseload power plants and the dedicated, skilled workers who operate them are the lifeblood of their communities. They deliver a strong tax base and support between three and eight times more high-paying jobs than do other forms of electricity generation. We depend on these plants to create a robust workforce, and the country depends on them to support a healthy economy and electricity supply.

Unless action is taken, the long-term viability of baseload power plants along with the jobs and substantial economic opportunities they bring is at risk. And, our national security could be compromised if we don't ensure a resilient grid. We encourage the Administration to take prompt and meaningful action to protect baseload power plants and America's energy future.

Sincerely,

A handwritten signature in black ink, appearing to read "Larry Tscheme".

Larry Tscheme
Business Manager
IBEW Local 245

Phone: (419) 666-3350
(888) 666-3350
Fax: (419) 666-5545



AFL-CIO

International Brotherhood of Electrical Workers

LOCAL UNION No. 245

705 LIME CITY ROAD

ROSSFORD, OHIO 43460

October 16, 2017

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

Re: Grid Resiliency Pricing Rule
FERC Docket No. RM18-1-000

COMMENTS OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS, LOCAL UNION 245 IN SUPPORT OF THE PROPOSED RESILIENCY RULE

On September 28, 2017, the Department of Energy ("DOE") issued the "Grid Resiliency Pricing Rule" (the "Proposal") directing the Federal Energy Regulatory Commission ("FERC") to adopt a rule requiring operators of organized markets to "ensure that certain reliability and resiliency attributes of electric generation sources are fully valued." Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in Ohio will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

IBEW Local 245 strongly supports the Proposal and shares the Secretary's urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members' loss of critical economic and reliability benefits. FERC has thoroughly

examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC has the requisite basis to act now. There is no time for delay. In addition to acting promptly, FERC should also direct organized market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Larry Tscherne
Business Mgr. & Financial Secretary
IBEW Local 245
705 Lime City Road, Rossford, Ohio 43460
419-356-4542
Larry@IBEW245.com

II. DESCRIPTION OF IBEW LOCAL 245

IBEW Local 245 is a progressive labor organization that represents individuals in the Utility, Generation, Construction, Government and Communications industries.

III. DESCRIPTION OF IBEW LOCAL 245'S INTEREST IN PROCEEDING

IBEW Local 245 is a party to a collective bargaining agreement with the owners of baseload coal and nuclear power plants located in Ohio. In addition to working in these plants, our members work on major infrastructure and industrial development projects that are dependent on the continued operation of the baseload coal and nuclear power plants. As a result, the wages, terms

and conditions of employment of its members may be directly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, IBEW Local 245 members have a direct and substantial interest in this proceeding. As well, the unique perspective of IBEW Local 245 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in Ohio's electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across Ohio. This has led to extreme hardship for the thousands of union workers and nonunion workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in Ohio provide thousands of MWs of reliable power, and provide many union jobs and economic opportunities to IBEW Local 245 members. The Davis Besse and Bayshore generation stations directly employ approximately 240 IBEW Local 245 members, and the maintenance and capital improvement work on these plants supports the local economy by creating thousands of well-paying union jobs for contractors. In addition, these plants contribute millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive

economy in two ways. First, the preservation of certain plants will avoid the need to replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed, reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled (and specifically trained and experienced) employees, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in Ohio, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, IBEW Local 245 strongly urges FERC to adopt the rule proposed by the DOE as promptly and comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by the comments considered in this proceeding. FERC has thoroughly considered the impact of electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of pre-mature closures.

In acting promptly, FERC should also direct the organized market operators to issue a rule that is not only compensatory (and based on the regulatory language of the Proposal) but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

Respectfully submitted,



Larry Tscherne
Business Manager and Financial Secretary
IBEW Local 245

From: john levengood
To: AskOE
Subject: Comment for nuclear energy issue
Date: Friday, April 13, 2018 12:51:31 PM

Document 49

Dear Secretary Perry,

Local 777 of the International Brotherhood of Electrical Workers ("Local 777") submits this comment to support the use of Section 202(c) of the Federal Power Act, 16 U.S.C. § 824a(c), or other appropriate legal authority, to ensure that the nation's baseload nuclear power plants remain in operation.

Local 777 is the authorized collective bargaining representative for more than 300 of the 700 people who work at Three Mile Island Unit 1 ("TMI 1") in Middletown, PA. TMI 1 is a nuclear power plant with an electric generating capacity of 803 megawatts. The plant is licensed to operate by the Nuclear Regulatory Commission until 2034. Unfortunately, given the economics of the power markets under the existing pricing and resiliency policies of the Federal Energy Regulatory Commission ("FERC") and the PJM Interconnection (the Regional Transmission Organization overseeing the pricing and dispatch of TMI 1), TMI 1 is scheduled to cease operations in September 2019 -- 15 years ahead of schedule.

Moreover, the plant is not subject to temporary disruptions in fuel supplies due to inclement weather, natural disasters, or other events. As is the case for most nuclear reactors, TMI 1 needs to refuel only once every two years. Between refueling outages, the reactor does not require any access to outside fuel supplies. TMI 1's most recent refueling outage ended on October 13, 2017, meaning that the plant is expected to run continuously until its expected permanent shut down on September 30, 2019.

Perhaps most importantly, nuclear power is vitally important in moving the United States and the world toward a sustainable climate. Diverse organizations such as the Union of Concerned Scientists (Nuclear Power & Global Warming, <https://www.ucsusa.org/nuclear-power/nuclear-power-and-global-warming#.WtDFHS7waM8>) and Environmental Defense Fund (John Finnigan, Why We Still Need America's Nuclear Power Plants — At Least for Now, Environmental Defense Fund, <http://blogs.edf.org/energyexchange/2017/04/17/why-we-still-need-americas-nuclear-power-plants-at-least-for-now/>); U.S. Senators from both political parties (Lamar Alexander and Sheldon Whitehouse, To Slow Global Warming, We Need Nuclear Power, The New York Times, Dec. 21, 2016); and many other policymakers and scientists recognize that nuclear power must be part of our energy future, at least for the next decade or more.

In fact, a 2013 report in Scientific American concluded that nuclear power must be part of our response to global climate change, stating:

"U.S. reactors have also been staving off another global challenge: climate change. The low-carbon electricity produced by such reactors provides 20 percent of the nation's power and, by the estimates of climate scientist James Hansen of Columbia University, avoided 64 billion metric tons of greenhouse gas pollution. They also avoided spewing soot and other air pollution like coal-fired power plants do and thus have saved some 1.8 million lives.

"And that's why Hansen, among others, such as former Secretary of Energy Steven Chu, thinks that nuclear power is a key energy technology to fend off catastrophic climate change.

...

"Indeed, he has evidence: the speediest drop in greenhouse gas pollution on record occurred in France in the 1970s and '80s, when that country transitioned from burning fossil fuels to nuclear fission for electricity, lowering its greenhouse emissions by roughly 2 percent per year. The world needs to drop its global warming pollution by 6 percent annually to avoid "dangerous" climate change in the estimation of Hansen and his co-authors in a recent paper in PLoS One. "On a global scale, it's hard to see how we could conceivably accomplish this without nuclear," added economist and co-author Jeffrey Sachs, director of the Earth Institute at Columbia University, where Hansen works."

(How Nuclear Power Can Stop Global Warming, Scientific American, Dec. 12, 2013, <https://www.scientificamerican.com/article/how-nuclear-power-can-stop-global-warming/>)

As you know, once a nuclear power plant closes, it is extremely difficult if not impossible to reopen it. Operating a plant requires hundreds of highly trained people. That talent pool will not be available years after a plant closes. Further, equipment within the plant will deteriorate if it is not operated and maintained. As a result, many climate scientists, environmental advocates, and energy-industry experts believe that keeping our existing nuclear plants in operation is part of a "no regrets" strategy for combating climate change.

Simply stated, as a matter of national and global security it makes no sense to shut down a zero-emissions plant 15 or 20 years before the end of its useful life. At a minimum, nuclear plants like TMI 1 should continue to operate until they can be replaced by zero-emitting alternatives. Today, and for the foreseeable future, zero-emitting options simply do not exist on the scale needed to replace even one nuclear plant like TMI (at more than 800 MW), let alone the nation's entire fleet of nuclear power plants.

As a practical matter, if TMI 1 and other nuclear plants are retired prematurely, they will be replaced by power plants fueled by natural gas. For example, according to the Energy Information Administration, there are just two new utility-scale wind projects planned for Pennsylvania, totaling 170 MW (EIA, Electric Power Monthly, Table 6.5 Planned U.S. Electric Generating Unit Additions (Mar. 23, 2018)) -- or only about 1/4 of the capacity that will be lost if TMI 1 closes prematurely. This will result in increased emissions of carbon dioxide, methane, and other greenhouse gases from new natural gas plants that are likely to exacerbate concerns with climate change.

Section 202(c) of the Federal Power Act authorizes the Federal Energy Regulatory Commission to issue an emergency order keeping certain power plants in operation "whenever the Commission determines that an emergency exists by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy or of fuel or water for generating facilities, *or other causes*". 16 U.S.C. § 824a(c)(1) (emphasis added). We submit to you that keeping zero-emissions nuclear power plants in operation in order to avoid further harm to our climate, is just such an emergency for "other cause" that is referred to in the statute.

Thank you for your consideration.

John H Levengood

President-IBEW Local 777

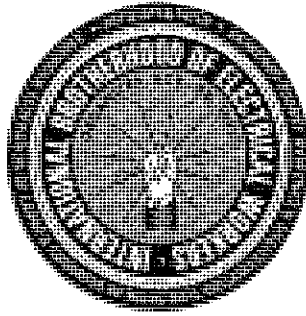
(b) (6)

Troy, Angela (CONTR)

From: Brian Kube <briankube@ibew1289.org>
Sent: Friday, April 13, 2018 12:34 PM
To: AskOE
Subject: Comments from IBEW Local 1289
Attachments: FERC letter from President Kube.docx; 2017 FERC Docket Grid Resiliency Pricing Rule.docx

To The U.S. Department of Energy,
As President of IBEW, Local 1289, I urge you to issue an emergency order pursuant to Federal Power Act Section 202(c).
Our workers and energy grid depend on coal and nuclear plants.
I have attached my previous correspondence asking the government to take action in this matter to support our
generation plants.

Brian Kube
President
IBEW Local 1289



LOCAL UNION 1289
P.O. BOX 1690 WALL, NJ 07719

Dear Editor,

For years, the federal government has systematically attempted to dismantle a major sector of the American economy at the expense of workers and good-paying jobs. Through massive regulations placed on nuclear power and coal-fired energy, Washington has decimated an industry that would otherwise be an economic pillar for communities in New Jersey and throughout the United States.

Nuclear and coal power represent America's only two baseload energy sources. They are defined by their resiliency – ample supply, stable prices, and reliable methods of delivery. Until recently, baseload sources provided the bulk of the fuel that powers our country's electrical grid. Now, nuclear and coal-fired power plants are shutting down at an alarming rate and will continue to do so, taking more and more jobs with them, unless the government acts quickly to reverse the damage.

The Department of Energy (DOE) has proposed to do just that. If approved, a new rule would lead energy markets to properly value resilient fuels like nuclear power and coal by allowing baseload power plants to recover costs. By doing so, plants slated for retirement would be able to keep their doors open.

Before it can take effect, the new rule must be approved by the Federal Energy Regulatory Commission (FERC). Unfortunately, some have balked at the opportunity to support reliable American energy and save thousands of American jobs.

FERC needs to act quickly to approve the DOE rule and allow resilient fuels to reach their potential as a stable source of power and a major economic driver for New Jersey and the country. Our workers, and our energy grid, depend on it.

Brian Kube
President
International Brotherhood of Electrical Workers, Local 1289

October 13, 2017

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

Re: Grid Resiliency Pricing Rule
FERC Docket No. RM18-1-000

COMMENTS OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL
WORKERS, LOCAL UNION 1289 IN SUPPORT OF THE PROPOSED RESILIENCY RULE

On September 28, 2017, the Department of Energy (“DOE”) issued the “Grid Resiliency Pricing Rule” (the “Proposal”) directing the Federal Energy Regulatory Commission (“FERC”) to adopt a rule requiring operators of organized markets to “ensure that certain reliability and resiliency attributes of electric generation sources are fully valued.” Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in New Jersey will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the longterm viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

IBEW Local 1289 strongly supports the Proposal and shares the Secretary’s urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members’ loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC has the requisite basis to act now.

There is no time for delay. In addition to acting promptly, FERC should also direct organized market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Brian Kube
President & Business Mgr. IBEW
Local 1289
PO Box 1690, Wall, NJ, 07719
732-918-9559
BrianKube@ibew1289.org

II. DESCRIPTION OF IBEW LOCAL 1289

IBEW Local 1289 is a progressive labor organization that represents individuals in the Utility, and Generation industries.

III. DESCRIPTION OF IBEW LOCAL 1289'S INTEREST IN PROCEEDING

IBEW Local 1289 is a party to a collective bargaining agreements with the owners of baseload coal and nuclear power plants located in Ohio, Pennsylvania and New Jersey. As a result, the wages, terms and conditions of employment of its members may be directly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, IBEW Local 1289

members have a direct and substantial interest in this proceeding. As well, the unique perspective of IBEW Local 1289 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in Ohio, Pennsylvania and New Jersey's electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across these states. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in these 3 states provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to IBEW Local 1289 members. IBEW Local 1289 has approximately 1400 members working in both utility and generating occupations in New Jersey, specifically the Oyster Creek nuclear plant and NRG generating operations. In addition to direct labor in the generation sector, the maintenance and capital improvement work at these plants supports the local economy by creating thousands of well-paying union jobs for contractors. These plants also contribute millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive economy in two ways. First, the preservation of certain plants will avoid the need to replace lost

generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed, reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled (and specifically trained and experienced) employees, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in Ohio, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, IBEW Local 1289 strongly urges FERC to adopt the rule proposed by the DOE as promptly and

comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by the comments considered in this proceeding. FERC has thoroughly considered the impact of electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of pre-mature closures.

In acting promptly, FERC should also direct the organized market operators to issue a rule that is not only compensatory (and based on the regulatory language of the Proposal) but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

Respectfully submitted,

Brian Kube
President & Business Manager
IBEW Local 1289

UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY

Request for Emergency Order Pursuant
To Federal Power Act Section 20(c) by
FirstEnergy Solutions Corp.

:
:
:
DOE Dkt. No. _____

**MOTION OF THE ILLINOIS INDUSTRIAL
ENERGY CONSUMERS TO INTERVENE**

The Illinois Industrial Energy Consumers ("IIEC"), by and through their counsel, hereby move to intervene in the above-captioned proceeding and protest the March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act Section 202(c) by FirstEnergy Solutions Corp. ("FES"), pursuant to Rules 211 and 214 of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214.

I. PROCEDURAL BACKGROUND

On March 29, 2018, FES issued a letter ("Request") to the Honorable James Richard Perry, Secretary of Energy, requesting that the Secretary use emergency authority under Section 202(c) of the Federal Power Act to find that an emergency condition exists in the PJM Interconnection, L.L.C. ("PJM") territory requiring immediate intervention. Specifically, FES requests that the Secretary (a) order "certain existing nuclear and coal-fired generators . . . to enter into contracts" with PJM to generate and transmit energy, capacity and ancillary services to "maintain the stability of the electric grid" and (b) order PJM to "promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide" to energy markets and the public. FES served the Request on over 100 owners of generation, transmission or distribution assets, state public utility commissions, and others.

II. MOTION TO INTERVENE

IIEC is an ad hoc association of large consumers of electricity that have facilities located in the Illinois portion of the PJM region. IIEC members are authorized under Illinois law to purchase electric energy and capacity from suppliers other than Illinois public utilities and are participants in the regional energy and capacity markets. IIEC members include large manufacturers in the steel, cement, paper, chemical, pharmaceutical, consumer products and other industries, and large institutional consumers of electricity. If the Request is granted, cost responsibility for payments made pursuant to the Emergency Order may be recovered from consumers and market participants throughout the PJM region, including IIEC member companies. IIEC strongly opposes the Request and reserves the right to supplement this preliminary pleading to explain, in detail, why the request is unjustified and unlawful, and should not be granted.

IIEC moves for intervention under Rule 214 of the Commission's Rules of Practice and Procedure.¹ Consistent with Rule 214(b)(2), IIEC has a significant and direct interest in the outcome of

¹ Federal Power Act Section 202(c) and the Department indicate that the Federal Power Act and the Commission's Rules of Practice and Procedure should be used for potential guidance in Emergency Order proceedings. Guidance published on the Department's website points to the Commission's Rules, where DOE regulations at 10 C.F.R. § 205.370, et seq., are silent. Additionally, the Department has taken the position that the procedure for the judicial review of emergency orders under Section 202(c) of the Federal Power Act must be secured through Section 313 of that Act, 16 U.S.C. § 8251. See, e.g., Order No. 202-05-03, *District of Columbia Public Service Commission*, Docket No. EO-05-01 (December 20, 2005) at 11-13. The plain language of Section 202(c)(5) of the Federal Power Act, enacted in 2016, reinforces this principle. Where, as here, a proceeding exists under Chapter 12 of the Federal Power Act, the Commission's Rules of Practice and Procedure apply. See 16 U.S. Code § 825g(b) (FPA § 308) ("All hearings, investigations, and proceedings, under this chapter shall be governed by rules of practice and procedure to be adopted by the Commission.").

this proceeding. Further, as an organization representing many of the largest electric consumers in the Illinois portion of PJM, IIEC's participation is in the public interest.

III. SERVICE OF DOCUMENTS

The following persons are designated by IIEC to receive service and communications on its behalf with regard to this proceeding:

Eric Robertson
Ryan Robertson
Lueders, Robertson & Konzen, LLC
1939 Delmar Avenue
P. O. Box 735
Granite City, IL 62040
618-876-8500 (Office)
618-876-4534 (Fax)
erobertson@lrklaw.com
ryrobertson@lrklaw.com

IV. STATEMENT OF OPPOSITION

Rule 214(b)(1) requires the movant to state its preliminary position. IIEC opposes the relief sought by FES. IIEC is participating with other parties to this proceeding, in developing a comprehensive rebuttal to FES' Request, and plans to submit that rebuttal to the Department.

IIEC supports the request that was filed Friday, March 30, 2018 by the Electric Power Supply Association and other organizations requesting a 60-day comment period.

V. CONCLUSION

For the reasons set forth above, IIEC respectfully requests that the Department permit IIEC to intervene in this proceeding and, if the Department does not reject the FES Request outright, provide all interested parties with 60 days to file comments on the Request.

DATED this 13th day of April, 2018.

Respectfully submitted,

LUEDERS, ROBERTSON & KONZEN, LLC

BY: /s/ Eric Robertson

Eric Robertson
Ryan Robertson
Lueders, Robertson & Konzen, LLC
1939 Delmar Avenue
P. O. Box 735
Granite City, IL 62040
618-876-8500
618-876-4534
erobertson@lrklaw.com
ryrobertson@lrklaw.com

Counsel to the Illinois Industrial Energy Consumers

90247.1

CERTIFICATE OF SERVICE

I hereby certify that I have this day served, via first-class mail, electronic transmission, or hand-delivery, the foregoing upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Granite City, Illinois, this 13th day of April, 2018.

BY: /s/ Eric Robertson

Eric Robertson
Lueders, Robertson & Konzen, LLC
1939 Delmar Avenue
P. O. Box 735
Granite City, IL 62040
618-876-8500
618-876-4534
erobertson@lrklaw.com

90247.2

From: Reuter, Jack B.
To: AskOE
Subject: Comments on FES request for 202(c) request.
Date: Friday, April 13, 2018 9:33:58 AM

There is no formal request for comments, so this is not a formal comment.
I do work at Davis Besse. I am also part of the public. I live in the north and it get cold here.
The price of electricity is controlled by the price of gas. The price of gas spikes when it is cold. This was very apparent this last winter.
Gas plants do not have guarantee to get gas. Gas plants have shut down, when the price of gas gets too high. Just look at the facts from last winter.
People get guarantee gas; however, most new furnaces do not run without electricity.
People will freeze to death.
When there are brown and black outs.
People will freeze to death.
You can keep lots of people from freezing to death.
If these plants do not get the, cost for electricity, they need to operate, I will be buying a generator that runs on propane.
I will not trust the electric grid. The (gas) wholesalers do not appear to have the public interest as any priority. They appear to just be trying to make the most money.
Can you grantee that there will be electricity when people need it most?
Can you grantee that there will not be brown out and black outs, when people need it most.
Can you grantee that people will not freeze to death because of a lack of electricity?
Do the right thing and protect the public from freezing.

Jack B Reuter
Radioactive Waste Supervisor at Davis Besse
Phone 419-321-7425
Cell (b) (6)
Email jbreuter@firstenergycorp.com

Life is a banquet but it is sad that so many people decide to go hungry!
Make your day great by enjoying the happiness of the day!
What you do not know cannot help you because only knowing the truth will set you free!

The information contained in this message is intended only for the personal and confidential use of the recipient(s) named above. If the reader of this message is not the intended recipient or an agent responsible for delivering it to the intended recipient, you are hereby notified that you have received this document in error and that any review, dissemination, distribution, or copying of this message is strictly prohibited. If you have received this communication in error, please notify us immediately, and delete the original message.

From: [Lotto, Adrienne](#)
To: [Bittner, Kathy \(CONTR\)](#)
Subject: FW: PJM Interconnection, L.L.C. Motion to Intervene and Limited Response to the March 29, 2018 Request For Emergency Order Pursuant To Federal Power Act Section 202(c) By FirstEnergy Solutions Corp.
Date: Saturday, April 14, 2018 12:00:19 AM
Attachments: [MOTION TO INTERVENE AND LIMITED RESPONSE.PDF](#)

From: Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>
Date: Friday, Apr 13, 2018, 6:54 PM
To: Walker, Bruce <Bruce.Walker@hq.doe.gov>, Lotto, Adrienne <Adrienne.Lotto@hq.doe.gov>
Subject: FW: PJM Interconnection, L.L.C. Motion to Intervene and Limited Response to the March 29, 2018 Request For Emergency Order Pursuant To Federal Power Act Section 202(c) By FirstEnergy Solutions Corp.

Fyi

From: Pincus, Steven <Steven.Pincus@pjm.com>
Date: Friday, Apr 13, 2018, 3:24 PM
To: AskOE <AskOE@hq.doe.gov>
Cc: Secretary Perry <The.Secretary@hq.doe.gov>, Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>, Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>, Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>, Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>, Glazer, Craig <Craig.Glazer@pjm.com>, Duane, Vincent P. <Vincent.Duane@pjm.com>, Tribulski, Jennifer <Jennifer.Tribulski@pjm.com>, Bryson, Mike E. <Michael.Bryson@pjm.com>, Burdis, Timothy <Timothy.Burdis@pjm.com>, Buehler, Susan <Susan.Buehler@pjm.com>, Dotter, Ray E. <Ray.Dotter@pjm.com>, O'Hara, Chris <Chris.OHara@pjm.com>, Souder, David W. <David.Souder@pjm.com>, Shields, Jeffrey, P <Jeffrey.Shields@pjm.com>
Subject: PJM Interconnection, L.L.C. Motion to Intervene and Limited Response to the March 29, 2018 Request For Emergency Order Pursuant To Federal Power Act Section 202(c) By FirstEnergy Solutions Corp.

Dear Secretary Perry:

PJM Interconnection, L.L.C. respectfully submits for filing the attached Motion to Intervene and Limited Response to the March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act Section 202(c) by FirstEnergy Solutions Corp.

Steven R. Pincus
Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6) | Steven.Pincus@pjm.com
PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

Request For Emergency Order Pursuant)
To Federal Power Act Section 202(c) By) Docket No. _____
FirstEnergy Solutions Corp.)

**MOTION TO INTERVENE AND LIMITED RESPONSE
OF PJM INTERCONNECTION, L.L.C.**

Pursuant to Rules 212 and 214 of the Federal Energy Regulatory Commission's ("FERC") Rules of Practice and Procedure, 18 C.F.R. §§ 385.212 and 385.214, and the United States Department of Energy's ("the Department") regulations, 10 C.F.R. § 205.383,¹ PJM Interconnection, L.L.C. ("PJM") respectfully files this Motion to Intervene and Limited Response to the March 29, 2018 Request (the "Request") for Emergency Order Pursuant to Federal Power Act ("FPA") Section 202(c), 16 U.S.C. § 824a, submitted by FirstEnergy Solutions Corporation ("FES") in this matter.

I. LIMITED RESPONSE

In its Request to Energy Secretary James Richard Perry (the "Secretary"), FES asks that the Secretary invoke emergency authority under Section 202(c) of the FPA to find that an emergency condition exists in the PJM region that requires immediate action by the Secretary. PJM's limited response, addresses two points to help clarify the record and contribute the Secretary's understanding of the issues.

¹ Federal Power Act Section 202(c) and the Department's policy and regulations provide that FERC's Rules of Practice and Procedure should be used for procedural guidance in Emergency Order proceedings. Guidance published on the Department's website points to the Commission's rules in situations where the Department's regulations at 10 C.F.R. § 205.370, *et. seq.*, are silent. *See, e.g.*, DOE Answer to Procedural Questions Concerning Rehearing of DOE Order, *District of Columbia Public Service Commission*, Docket No. E0-05-01 (December 30, 2005) at 2.

First, for the reasons stated in a letter dated March 30, 2018, to the Secretary from PJM's Senior Vice President, General Counsel, Law, Compliance & External Affairs, Vincent P. Duane (attached hereto as Attachment I), FES has not objectively established that an emergency exists within the meaning of Section 202(c) of the FPA or that there is an immediate threat to system reliability.

Second, FES relies on a report issued by the National Energy Technology Laboratories ("NETL") on March 13, 2018,² to support the Request. PJM respectfully submits herewith PJM's perspective and its response to the NETL Report ("PJM Report" attached hereto as Attachment II).³ The PJM Report will be posted publicly on PJM's website and is submitted for consideration by the Secretary in light of the analysis and conclusions undertaken by the NETL. The PJM Report summarizes PJM's assessment of system operations during the 2017/2018 cold snap period in response to the conclusions reached by the NETL in its report. The PJM Report finds that performance during the 2017/2018 cold snap is "evidence that the grid in the PJM service area remains strong, diverse and reliable."⁴

II. MOTION TO INTERVENE

PJM is a FERC established independent system operator and Regional Transmission Organization.⁵ PJM is a transmission provider under and the administrator of the PJM Open Access Transmission Tariff, operates the PJM markets and conducts the day-to-day operations of the bulk power system in the PJM region.

² NAT'L ENERGY TECH. LAB., RELIABILITY, RESILIENCE AND THE ONCOMING WAVE OF RETIRING BASELOAD UNITS VOLUME I: THE CRITICAL ROLE OF THERMAL UNITS DURING EXTREME WEATHER EVENTS 12 (Mar. 13, 2018) ("NETL Report").

³ *Perspective and Response of PJM Interconnection to National Energy Technology Laboratories Report Issued March 13, 2018*.

⁴ PJM Report page 10.

⁵ *Pennsylvania-New Jersey-Maryland Interconnection*, 81 FERC ¶ 61,252 (1997), *reh'g denied*, 92 FERC ¶ 61,282 (2000); *PJM Interconnection, L.L.C.*, 101 FERC ¶ 61,345 (2002).

Based on the foregoing PJM has an independent interest in this proceeding that no other party can represent adequately.

III. CORRESPONDENCE AND COMMUNICATION

The following individuals are designated for inclusion on the official service list in this proceeding and for receipt of any communication regarding this matter:

Craig Glazer
Vice President–Federal Government Policy
PJM Interconnection, L.L.C.
1200 G Street, N.W, Suite 600
Washington, D.C. 20005
(b) (6)
craig.glazer@pjm.com

Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403
(610) 666-4438
steven.pincus@pjm.com

IV. CONCLUSION

For the reasons stated above, PJM respectfully requests that the Secretary grant this Motion to Intervene, accept and consider the limited response provided herein and afford PJM all the rights of a party to this proceeding.

Respectfully submitted,

/s/ Steven R Pincus

Craig Glazer
VP, Federal Government Policy
PJM Interconnection, L.L.C.
Suite 600
1200 G Street, N.W.
Washington, DC 20005
(b) (6) (phone)

Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C
2750 Monroe Boulevard
Audubon, PA 19403
(610) 666-4370 (phone)

Dated: April 13, 2018

CERTIFICATE OF SERVICE

I hereby certify that I this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Audubon, PA this 13th day of April, 2018

/s/ Steven R. Pincus
Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403
(610) 666-4370
steven.pincus@pjm.com

Attachment 1

Letter dated March 30, 2018,

to the Secretary

from PJM's Senior Vice President,
General Counsel, Law, Compliance &
External Affairs, Vincent P. Duane



2750 Monroe Boulevard
Audubon, PA 19403-2497

Vincent P. Duane
Sr. VP General Counsel, Law, Compliance
& External Affairs
610.666.4367
610.666.4281 FAX
Vincent.duane@pjm.com

March 30, 2018

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: FirstEnergy Solutions' Request for Emergency Relief under Section 202 of the Federal Power Act

Dear Secretary Perry:

PJM Interconnection, LLC (PJM) respectfully seeks to submit this response to the above-referenced request filed by FirstEnergy Solutions and affiliates (FES) on March 29, 2018. While the PJM system presently is reliable by all measures, PJM will refrain, at this time, from responding to FES' assertion that an "emergency condition" will arise should certain FES nuclear plants and potentially certain FES coal plants retire in upcoming years as announced or threatened by the company.¹

PJM will not use this opportunity to express agreement or disagreement with several major points of argument advanced by FES; nor will we correct at this time several misstated facts presented by FES. Instead, PJM simply points out to the Secretary two very obvious and objective facts that relieve the Department from the need to take precipitous, immediate action to address FES' request.

First, whether FES' actions create a reliability concern that may threaten the stable and reliable operation of the grid, much less constitute an emergency within the meaning of Section 202(c) of the Federal Power Act, is a question that will be answered by a proscribed, detailed and regularly employed process found in Part V of the PJM Tariff. Consistent with the PJM Tariff, over the next 30 days, PJM will undertake a thorough analysis of its system to determine whether the announced retirements would present systemic adequacy issues or any local reliability issues, such as insufficient voltage support. Should any such finding result, the PJM Tariff provides an additional 60 days to work with FES and a range of tools available, including ordering transmission system upgrades and, if necessary, offering full cost of service compensation under Part V of the PJM Tariff to induce assets to remain temporarily on-line. Ultimately, PJM could also join FES in its instant request should other remedial options prove insufficient.

Second, PJM can state without reservation there is no immediate threat to system reliability. Indeed, the FES units that announced their expected retirement earlier this week, by their own disclosures, will remain operational in most cases until through May 2021. Moreover, these announcements are not binding – FES

¹ Curiously, the request purports to seek relief for the entire FES merchant fleet - and somehow on behalf of others - relief for *all* other coal and nuclear units in PJM, totaling over 80 generation units. PJM will evaluate the question of impaired reliability or an "emergency condition" based on actual facts – announced retirements – not on the company's general dissatisfaction with the PJM markets or its competitive position therein. Nor will PJM evaluate the impact of closure of other companies' plants unless or until owners of such plants raise the matter with PJM.

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can elect to rescind this notice, or should assets be sold, a subsequent purchaser likewise may decide to continue to operate the units. But even assuming these units do in fact close as of the dates announced, PJM, FERC, and the Department of Energy will have ample time before then to take measures, which at the extreme might include the kind of relief sought in the instant request.

PJM therefore respectfully requests that the Secretary allow PJM's FERC-accepted process to unfold in an orderly manner and refrain from taking unnecessary, extraordinary and precedential immediate action as sought by FES. PJM will commit to sharing publicly (to the maximum extent possible), and in any event to the Department of Energy, our findings resulting from our 30-day process for evaluating the system implications of FES' announced retirements.

Thank you for considering PJM's perspective and suggestions.

Sincerely,



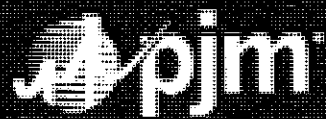
Vincent P. Duane

cc: Mark Menezes, DOE
Bruce Walker, DOE
Sean Cunningham, DOE
Patricia Hoffman, DOE
Catherine Jereza, DOE

Attachment 2

Perspective and Response of PJM Interconnection to National Energy Technology Laboratories Report Issued March 13, 2018

Perspective and Response of PJM Interconnection to
National Energy Technology Laboratories Report Issued March 13, 2018





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Executive Summary

In March 2018, the U.S. Department of Energy's National Energy Technology Laboratory (NETL) released a report¹ assessing electric operations in the nation's Independent System Operators (ISOs) and Regional Transmission Organizations (RTOs) during a prolonged cold snap from Dec. 27, 2017–Jan. 7, 2018. In part, the report focuses on operations in the PJM Interconnection service area. PJM appreciates NETL's overall attention to system performance of each of the northeastern RTOs and ISOs during this period. PJM presents this report to review for the public the analysis undertaken by NETL and the conclusions reached.

PJM believes that the NETL report, as it relates to PJM, reaches some sweeping conclusions that are not supported by the specific facts concerning grid operations during Dec. 27, 2017–Jan. 7, 2018. Although the NETL report contains some appropriate analysis and asks valid questions, the report's overall conclusion is incorrect about the reasons for PJM's dispatch of coal units during the cold snap. PJM dispatched coal units because *their costs were lower* during certain hours of the cold snap. Natural gas and nuclear units were not unreliable or otherwise unavailable to serve the increased customer demand, nor would PJM have faced "interconnect-wide blackouts" without the particular generating units dispatched, as the NETL report claimed. For example, in its Executive Summary, the NETL report reaches the following conclusion:

"In PJM, the largest of the ISOs, coal provided the most resilient form of generation, due to available reserve capacity and on-site fuel availability, far exceeding all other sources (providing three times the incremental generation from natural gas and twelve times that from nuclear units); without available capacity from partially utilized coal units, PJM would have experienced shortfalls leading to interconnect-wide blackouts."

Executive Summary at p. 1.

PJM agrees that the report underscores the importance of a fuel-secure generation fleet to serve future demands. But in PJM's view, the report erroneously concludes that the relative *economics* of coal and nuclear vs. natural gas during the cold snap, which drove the dispatch of coal units (i.e., that the cost of coal was lower), indicates that the system would have faced "shortfalls leading to interconnect-wide blackouts" during this period. As PJM demonstrated in its own report² on system performance during the cold snap, PJM had adequate amounts of resources to supply power – the price of natural gas relative to coal and nuclear during the cold snap drove the dispatch decisions.

During the cold snap, the region experienced an increase in the price of natural gas, which made coal resources (which often did not run under periods of lower natural gas prices) the more economic choice during times of high gas prices. But one cannot extrapolate from these economic facts a conclusion as to future reliability within PJM.

¹ Reliability, Resilience and the Oncoming Wave of Retiring Baseload Units, Volume I: The Critical Role of Thermal Units During Extreme Weather Events; NETL; Mar. 13, 2018; https://www.netl.doe.gov/energy-analyses/temp/ReliabilityandtheOncomingWaveofRetiringBaseloadUnitsVolumeITheCriticalRoleofThermalUnits_031318.pdf

² PJM Cold Snap Performance: Dec. 28, 2017 to Jan. 7, 2018; PJM Interconnection; Feb. 26, 2018; at p. 32; <http://www.pjm.com/-/media/library/reports-notice/weather-related/20180226-january-2018-cold-weather-event-report.ashx>

PJM acknowledges that fuel security is a topic deserving increased focus. PJM has already taken steps to increase fuel security through many initiatives that have been implemented with approval of the Federal Energy Regulatory Commission (FERC), including its Capacity Performance reforms to its Reliability Pricing Model capacity market. These changes, designed to more clearly define the obligations of capacity resources to be available when called upon (and to secure adequate fuel supplies to do so) with stiff penalties for non-compliance, were a key first step in ensuring fuel security among those resources that PJM counts on to ensure reliability.

PJM is committed to further action to adequately value and price fuel-secure resources. PJM intends to pursue these initiatives in a manner that does not choose one particular fuel type over another. Instead, PJM will rely on a clear definition of attributes, and the adoption of market-based mechanisms to price those attributes, in order to drive competitive and efficient results that ensure the continued supply of reliable electricity to meet the region's needs at the lowest reasonable cost. PJM looks forward to working with its stakeholders, the Department of Energy (DOE) and the FERC on these initiatives.

PJM's View — Key Points:

- **Defining Resilience:** When using the term "resilience," the NETL report mixes the availability of adequate generation to meet load with the costs of particular resources in a given hour and their impact on economic dispatch. In essence, the NETL report attempts to quantify "resilience" by comparing the dispatched resource mix by fuel type during a mild demand period to the dispatched resource mix by fuel type during the cold snap period. The report then labels the incremental change in resource fuel types supplying electricity during the cold snap period as "resilience," implying resource availability was physically impaired, which led to a shift in dispatch during the cold snap between coal and natural gas.

However, as noted above, the driver of the higher dependence on coal during the cold snap was the economics (i.e., lower cost) of coal vs. natural gas on an hour-by-hour basis.

PJM's dispatch is designed to ensure both reliability of supplies and competitiveness of prices for customers. PJM does this by "stacking" bids of the units bidding to serve customers in a given interval and only dispatching those units needed based on the lowest cost resources available to meet demand. During a number of hours of the cold snap, coal resources were more economic (i.e., less expensive) than natural gas resources.

This is a "good news" story for coal resources from an economic viewpoint, but the fact that additional coal resources were dispatched due to economics is not a basis to conclude that natural gas resources were not available to meet PJM system demands or that without the coal resources during this period the PJM grid would have faced "shortfalls leading to interconnect-wide blackouts."

In fact, during the cold snap, PJM reserves were over 23 percent of peak load demand, and there were few units that were unable to obtain natural gas transportation, even for most units that relied only on interruptible service.

NETL also makes the argument that offline coal, which came online "suddenly" during the cold weather, acted as adaptive resilient generation. 57 percent of coal generation was self-scheduled and 41 percent was scheduled based on economic offers – largely due to the lower cost of coal vs. gas. By the same token, any natural gas units

that were available³ but not scheduled were counted as offline reserves and, therefore, can also be considered adaptive resilient generation. This is the primary mechanism PJM uses to make reserves available on the system. Those resources that are the most economic (i.e., lowest cost) to provide energy are dispatched to do so, while more expensive resources are held offline and provide reserves. For the peak day of Jan. 5, 28,883 MW of natural gas were available but not scheduled as energy or reserves. These units can also be considered as adaptive reserves using the NETL approach.

- **Emergency Procedures:** PJM's emergency procedures process signals system operators to perform specific actions if system conditions have the potential to deteriorate. Leading up to and during the 2017/2018 cold snap, PJM did not enter into conservative or corrective emergency actions to address capacity or reserve shortages.
- **Forced Outages:** NETL attributes the increase in coal usage to potential issues related to natural gas fuel supply. Generation outages due to fuel supply issues were not prominent. Jan. 5, 2018, hour-ending 1900, the PJM system hit its peak demand during the cold snap period of 137,522 MW. At that time, PJM experienced 2,680 MW of outages due to fuel supply, 2,181 MW of which were related to natural gas supply. This represents a relatively small portion of the total 16,671 MW of all generation was forced offline during that time.
- **Available Capacity and Operating Reserve Margins:** NETL does not identify the level of system reserves available to operators during the cold snap period. The PJM system had 32,645 MW, or 23 percent, of additional capacity available to serve demand during the peak demand of the cold snap period. As illustrated graphically below, PJM's Operating Reserves market, a time-based reliability product for maintaining and dispatching reserves quickly, also maintained sufficient levels throughout the period.

Emergency Procedures

PJM's Emergency Procedures⁴ identify the instructions, rules, procedures and guidelines for the operation of the region's bulk electric system⁵. Under more extreme system conditions, PJM's Emergency Procedures include actions by which PJM would declare capacity or reserve emergencies and subsequent remedial steps.⁶ For instance, PJM is able to recall off-system sales of energy from resources committed to serve the PJM region. Leading up to and during the cold snap event, PJM entered into Cold Weather Alerts⁷ and High Load Voltage Schedule Warnings and Actions.⁸ Neither procedure

³ Available units are mechanically able to operate but may not be scheduled based on economics. A simple call to those units would get those units operating on the system.

⁴ PJM Manual 13: Emergency Operations; PJM Interconnection; v.65 effective January 1, 2018;
<http://www.pjm.com/~media/documents/manuals/m13.ashx>

⁵ At times of actual or potential emergency conditions, PJM will issue emergency procedure notifications ranging in severity from informational alerts and warnings to critical system actions.

⁶ *Id.* Section 2, p. 16

⁷ Cold Weather Alerts serve to notify members of higher-than-normal demand, notify asset owners to restore all available transmission and generation equipment, and notify asset owners to defer any maintenance activities planned during the alert period.

represents a capacity or reserve shortage condition. The PJM market did not enter a Performance Assessment Interval. Performance Assessment Intervals are time periods when emergency conditions require capacity committed to serve the PJM market to perform to their committed, prescribed level or suffer significant financial penalty.

Economic Dispatch

As described above, through economic dispatch, PJM uses the lowest cost set of resources to serve demand at a given interval. During the cold snap, coal and oil resources became more economic than natural gas-fired resources when natural gas prices rose.

The average megawatt contribution by fuel type for the morning (Figure 1) and evening peaks (Figure 2) of Dec. 1, 2017–Jan. 7, 2018 are shown below. The megawatts obtained from natural gas and nuclear capacity remain relatively stable in both periods. Coal and oil generation output increased.

The stable output of nuclear generation is expected because nuclear generation typically operates at its full capability whenever it is available. The increase in output from coal and oil is attributable to the economics of the supply offers into the market. Figure 3 shows the supply offers of available resources. The dashed lines represent coal and gas offers from Dec. 1–26, 2017. The solid lines represent coal and gas offers during the Dec. 27, 2017–Jan. 7, 2018 cold snap period.

While coal offers remained relatively consistent between the two periods — in the \$0–30/MWh range — during mild system conditions, considerable contributions of natural gas are more economic than some coal resources. Progressing to the elevated demand period during the cold snap, the supply curve for gas resources shifts as fuel becomes more expensive, making coal (and oil) resources more economic to operate.

⁸ Heavy Load Voltage Schedule Warnings and Actions alert transmission owners to energize all capacitors, remove all reactors and optimize voltage schedules to help maximize the power transfer capability of the system. By taking these steps, PJM ensures the system is positioned in the most resilient manner possible, allowing us to move power from one area to another if there are major generator or transmission failures. These procedures are issued proactively and do not signify any capacity or transmission concerns.

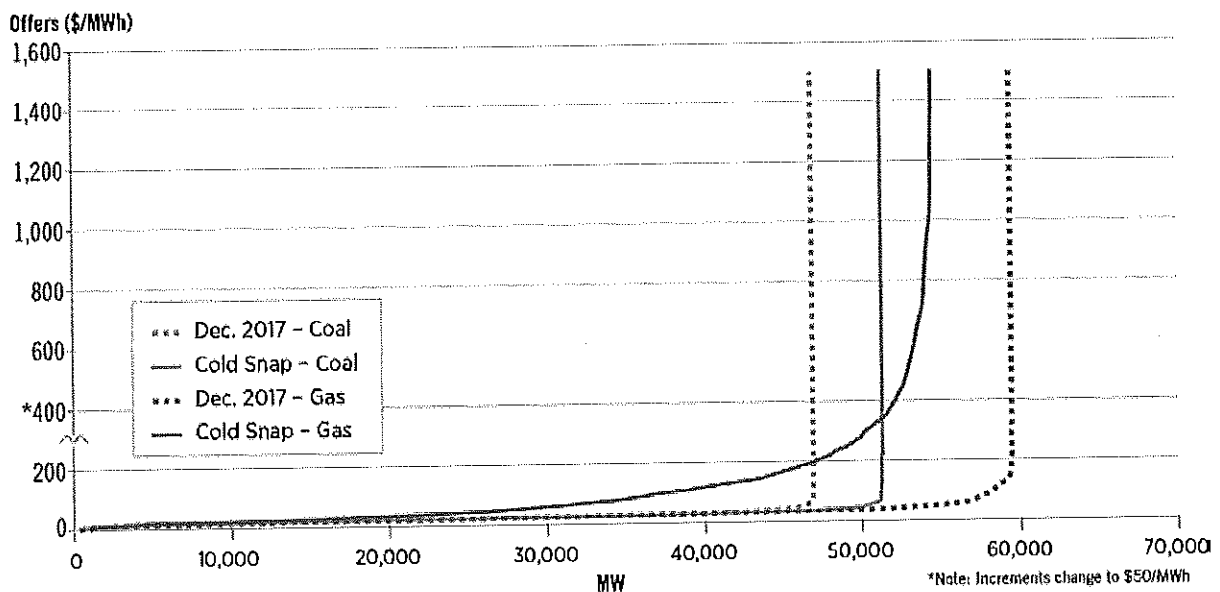
Figure 1. Average Morning Peak Megawatt Output by Fuel Type, Dec. 1, 2017–Jan. 7, 2018

Fuel Type	Morning Peak Period – HE 0900			
	Average for Dec. 1–26, 2017		Average for Dec. 27, 2017–Jan 7, 2018	
	Average Per Hour (MW)	Total Generation (%)	Average Per Hour (MW)	Total Generation (%)
Coal	32,676	32%	45,506	37%
Gas	27,090	27%	27,600	23%
Hydro	2,415	2%	2,806	2%
Multiple Fuels	90	0%	376	0%
Nuclear	35,289	35%	35,448	29%
Oil	295	0%	5,855	5%
Other	61	0%	59	0%
Other Renewables	641	0%	728	0%
Solar	87	0%	89	0%
Storage	-	0%	-	0%
Wind	3,398	3%	3,030	3%

Figure 2. Average Evening Peak Megawatt Output by Fuel Type, Dec. 1, 2017–Jan. 7, 2018

Fuel Type	Evening Peak Period – HE 1900			
	Average for Dec. 1–26, 2017		Average for Dec. 27, 2017–Jan 7, 2018	
	Average Per Hour (MW)	Total Generation (%)	Average Per Hour (MW)	Total Generation (%)
Coal	34,105	32%	45,922	37%
Gas	29,919	28%	29,242	24%
Hydro	3,320	3%	2,875	2%
Multiple Fuels	100	0%	385	0%
Nuclear	35,237	33%	35,440	29%
Oil	276	0%	5,815	5%
Other	37	0%	38	0%
Other Renewables	638	0%	741	0%
Solar	3	0%	1	0%
Storage	-	0%	-	0%
Wind	3,103	3%	3,138	3%

Figure 3. Avg. Incremental Generation Supply Offers by Fuel Type, Dec. 1, 2017–Jan. 7, 2018⁹



Forced Outages

Figure 4 shows that on Jan. 5, 2018, hour-ending 1900, PJM's peak demand day during the cold snap, PJM experienced a total of 16,671 MW of forced outages for all reasons. Data below shows that overall forced outages during the peak demand hour of the recent cold snap were about half what they were during the 2014 Polar Vortex.

Figure 5 shows that on Jan. 5, 2018, hour-ending 1900, PJM's peak demand day during the cold snap, out of the total forced outage MW PJM experienced 2,680 MW of outages due to fuel supply. 2,181 MW of fuel supply-related outages were due to natural gas supply. This represents less than 2 percent of the total load requirement at the time. During the cold snap period, PJM's highest experienced outages due to fuel supply occurred on Jan. 7, 2018, hour-ending 0900. At this time, 6,418 MW were unavailable to operators, with natural gas making up the majority of fuel type outages in this category. By contrast, forced outages due to fuel supply issues during the 2014 Polar Vortex peaked at roughly 10,000 MW.¹⁰

⁹ 'Dec. 2017' represents the period prior to the cold snap experienced in PJM (Dec. 1 – 26, 2017). 'Cold Snap' represents the period during the cold snap experienced in PJM (Dec. 27, 2017 – Jan. 7, 2018).

¹⁰ Analysis of Operational Events and Market Impacts During the January 2014 Cold Weather Events; PJM Interconnection; May 8, 2014; at pp. 24–25; <http://pjm.com/~media/committees-groups/task-forces/cstf/20140509/20140509-item-02-cold-weather-report.ashx>

Figure 4. Forced Outages Due to Fuel Supply Issue by Fuel Type

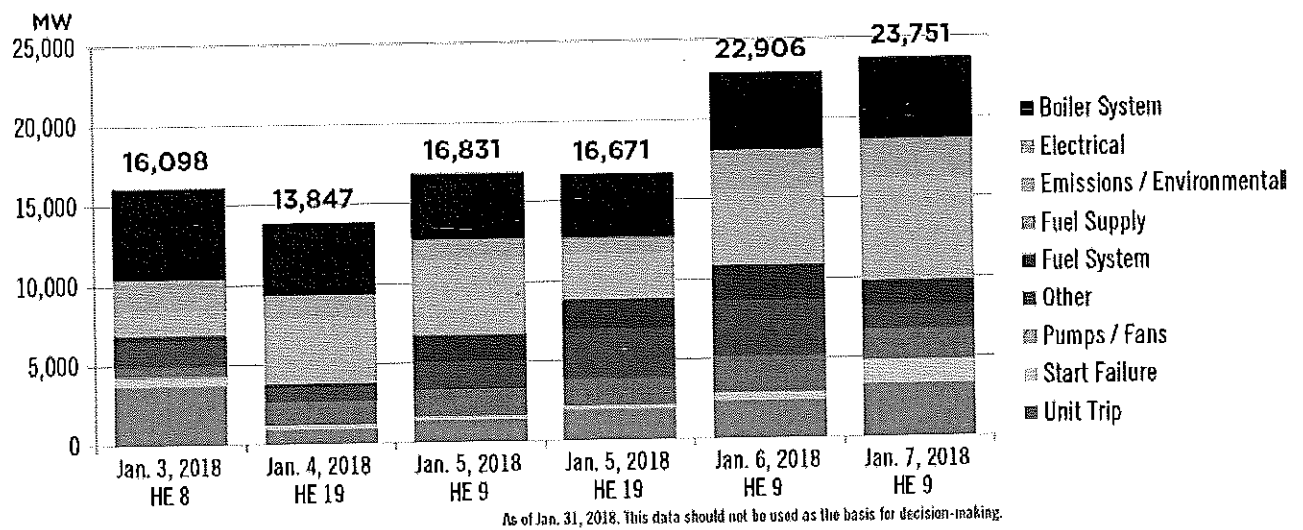
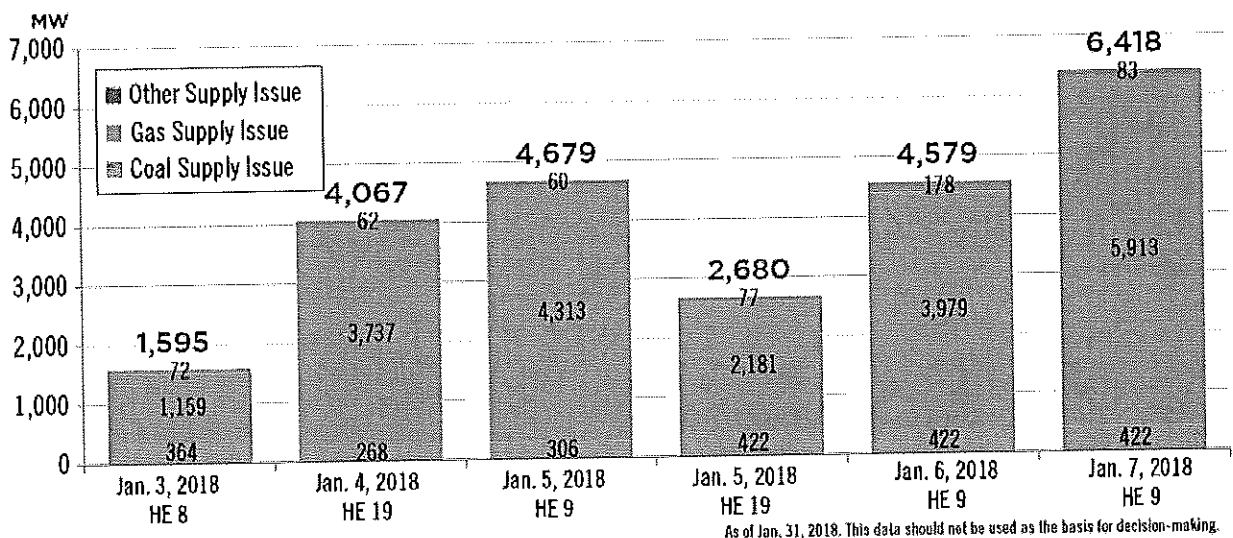


Figure 5. Forced Outage Causes



Available Capacity and Operating Reserve Margins

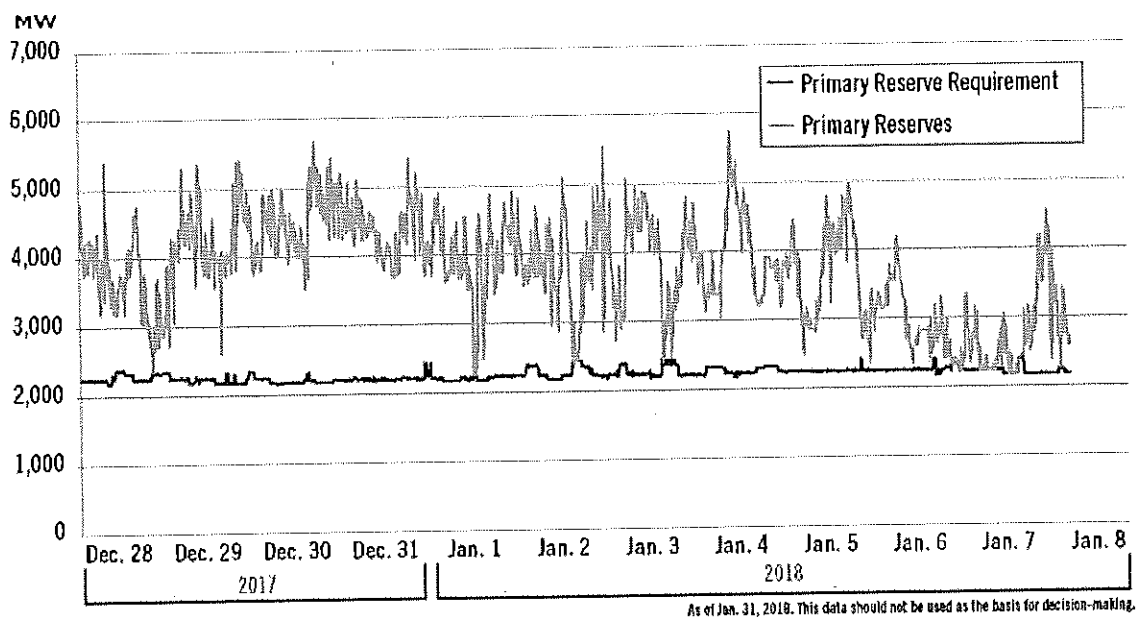
During the cold snap period, PJM maintained healthy reserve margins. Figure 6 illustrates that during the peak demand period of the cold snap period, PJM maintained more than a 23 percent reserve margin above the 18,690 MW of capacity that was unavailable. To put that into perspective, the PJM system had 32,645 MW of additional capacity available to serve demand.

Figure 6. PJM Available Capacity Reserve Margin, Jan. 5, 2018 HE 1900

PJM Cold Snap System Peak Period Jan. 5, 2018 HE 1900		
		Description
PJM Installed Capacity	188,875 MW	All PJM capacity market committed internal and external installed capacity (Includes wind and solar at unforced capacity ratings. Excludes energy-only units and any winter ambient uprates.)
All Outages	18,690 MW	Includes: All forced, maintenance and planned outages.
PJM Installed Capacity Available	170,167 MW	"PJM Installed Capacity" less "All Outages"
Demand	137,522 MW	The PJM peak demand during the cold snap period
Installed Capacity Reserve Margin	37.3%	"PJM Installed Capacity" divided by "Demand" less 1
Available Capacity Reserve Margin	23.7%	"PJM Installed Capacity Available" divided by "Demand" less 1

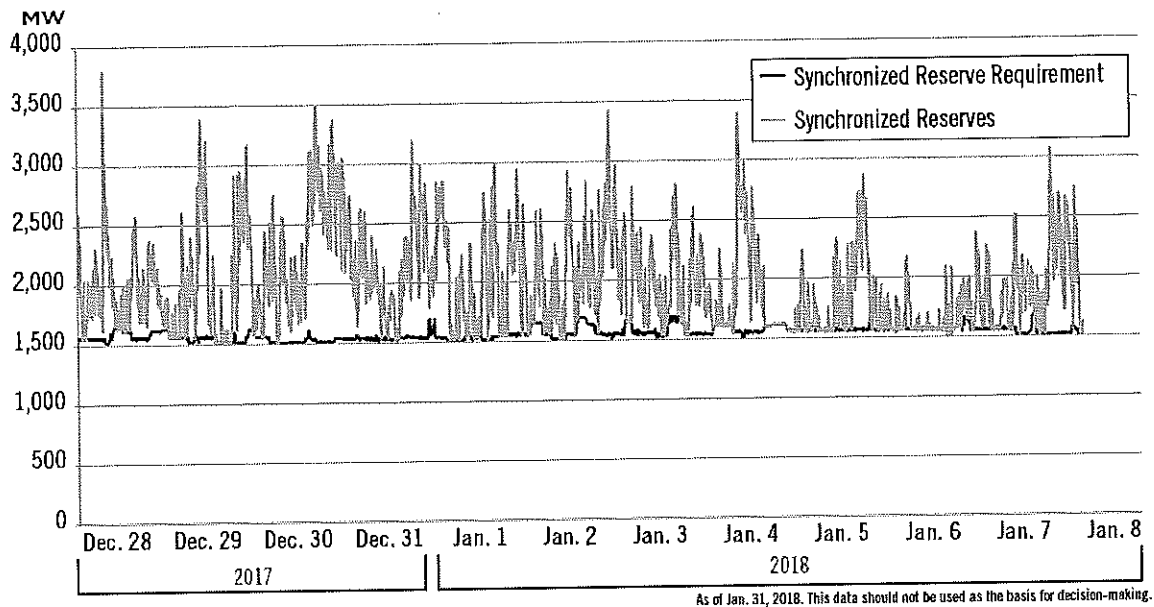
During the cold snap, PJM did not experience reserve shortage conditions. Sufficient reserves were available to meet both the contingency (primary) and synchronized reserve requirements as illustrated below. Figure 7 compares the contingency (primary) reserve values to the contingency reserve requirement and Figure 8 compares the synchronized reserves to the synchronized reserve requirement¹¹.

Figure 7. Contingency (Primary Reserves), Dec. 28, 2017–Jan. 8, 2018



¹¹ Primary reserves are the total quantity of resources both synchronized and not synchronized to the grid, assigned to respond within ten minutes when deployed. Synchronized reserves is a subset of primary reserves, and is comprised of only resources that are synchronized to the grid.

Figure 8. Synchronized Reserves, Dec. 28, 2017—Jan. 8, 2018



Conclusion and Next Steps

PJM noted in its previous report¹² on performance during the cold snap that thanks to the reliable operations from PJM members and operators, the system performed well in the cold snap, evidence that the grid in the PJM service area remains strong, diverse and reliable. In fact, PJM has implemented the Reliability Pricing Model and Capacity Performance as key steps to securing an adequate level of reserves with enhanced unit performance to mitigate the impacts of extreme weather and generator retirements resulting from environmental regulations.

Additionally, PJM noted that more work needs to be done to properly recognize and price key generator attributes associated with fuel security. NETL's report continues an important conversation to focus on the resilience of the nation's bulk electric system. In prior reports and filings with FERC, PJM has highlighted the importance of developing fuel security criteria that can be incorporated and priced in the PJM markets. PJM is also looking to add resilience drivers into its planning process and to enhance gas-electric coordination.

PJM has detailed both its own actions in order to enhance resilience and specific recommendations for action that it submitted to FERC in PJM's March 9 Comments in FERC's Grid Resilience docket (Docket No. AD18-7-000). PJM intends to continue communication with the DOE and with the FERC, states and stakeholders to underscore these needed actions and looks forward to working with the DOE to further focus efforts on ensuring a competitive market-based approach that ensures fuel security is appropriately valued in the markets.

PJM urges that the comments above be taken as a factual response to the conclusions reached in the NETL report. Most importantly, PJM appreciates NETL's contribution to focusing policymakers' attention on these issues going forward.

¹² *Id.*, PJM 2017/2018 Cold Snap Report

Troy, Angela (CONTR)

From: Mike Langford <mlangford@uwua.net>
Sent: Friday, April 13, 2018 2:04 PM
To: AskOE
Subject: UWUA Comments Re: Federal Power Act Section 202(c) Emergency Order
Attachments: Apr 2018 UWUA Comments Re Fedl Power Act 202C Emerg Order.pdf; Feb 2018 UWUA Ltr Pres Trump.pdf; May 2017 UWUA Ltr Sec Energy.pdf; Oct 2017 UWUA-AFLCIO Grid Resiliency Comments.pdf

Utility Workers Union of America, AFL-CIO
Comments Re: Federal Power Act Section 202(c) Emergency Order

The Honorable Rick Perry
 Secretary of Energy

Dear Mr. Secretary:

The Utility Workers Union of America represents tens of thousands of hard-working Americans whose families and communities rely on the electric generation industry for family-supporting jobs and critical revenue to support their local economies. In recent months, we have filed comments (attached) with the Department of Energy seeking the agency's support to allow irreplaceable baseload power generation infrastructure to continue providing resiliency and security to the nation's power grid.

In continued support for the value that reliable, baseload power generators such as coal-fired and nuclear powerplants contribute to our national grid, we ask that you take swift action to issue an emergency order pursuant to Federal Power Act Section 202(c) allowing the power these facilities generate to receive proper market valuation for the full costs of their operation and for the security and reliability they provide to our nation's electric infrastructure.

Continued under-valuation of the contribution made by these facilities is resulting in the premature closure of powerplants, the displacement of tens of thousands of workers and loss of high-quality jobs, the disruption and disintegration of the communities around them, and a dangerous weakening of our physical infrastructure leading to unprecedented national security concerns. No nation can be considered safe that cannot reliably and affordably power its economic and physical systems.

Allowing this alarming trend to continue will create a state of true national emergency, unreckoned with in our lifetimes, as electric power becomes ever less reliable, the grid increasingly unstable and insecure, and entire regional economies sink into ruin.

Once baseload powerplants close, they cannot be brought back in any meaningful timeframe, if allowed to happen, reversal of this mistake will be an economic and political impossibility, leaving our nation with few options. Further, only the most trivial of assistance is currently available to displaced workers and their communities in the face of powerplant closures, creating corresponding social chaos in parallel with the economic and physical harm caused by the erosion of a stable power grid.

Now is the time to act. An emergency order under Section 202(c), or other legal authorities available to you as Secretary of Energy, must occur before the damage becomes irreversible.

We thank you and the agency for the seriousness with which you are taking this unfolding emergency, and stand ready to assist and support in any effort to avert this national crisis.

Sincerely,

D. Michael Langford
 National President
 Utility Workers Union of America, AFL-CIO

National Office
 1300 L Street, N.W., Suite 1200
 Washington, DC 20005
 (202) 899-2851

UTILITY WORKERS UNION OF AMERICA

D. MICHAEL LANGFORD
PRESIDENT

STEVEN VANSLOOTEN
EXECUTIVE VICE PRESIDENT

MICHAEL COLEMAN
SECRETARY-TREASURER

JOHN DUFFY
VICE PRESIDENT

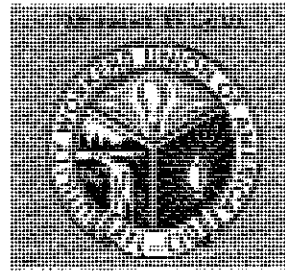
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April 13, 2018

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Secretary of the U.S. Department of Energy

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Now is the time to act. An emergency order under Section 202(c), or other legal authorities available to you as Secretary of Energy, must occur before the damage becomes irreversible.

We thank you and the agency for the seriousness with which you are taking this unfolding emergency and stand ready to assist and support in any effort to avert this national crisis.

Sincerely,

A handwritten signature of D. Michael Langford in dark ink.

D. Michael Langford
National President
Utility Workers Union of America, AFL-CIO



UTILITY WORKERS UNION OF AMERICA

D. MICHAEL LANGFORD
PRESIDENT

STEVEN VANSLOOTEN
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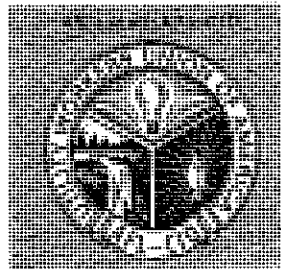
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February 20, 2018

President Donald J. Trump
The White House
1600 Pennsylvania Ave, NW
Washington, DC 20050

Dear President Trump,

The hard-working men and woman who work in our nation's power plants need your help – and they need your help now. Last month, the Federal Energy Regulatory Commission (FERC) rejected a proposed rule by the Department of Energy (DOE) that would have corrected competitive electricity markets to appropriately value attributes uniquely provided by fuel-secure baseload generators - predominantly critical coal and nuclear power plants. FERC's failure to timely address the pressing need to fix America's electricity markets will have devastating consequences for our economy, our power grid, and our national security.

Most alarmingly, power plant closures will be immediate and irreversible. Largely because of punitive regulatory pressures against coal and nuclear power, approximately 60,000 megawatts of fuel-secure baseload power plants have closed over the last several years and many more are slated for premature closure in the near future. Unfortunately, the improved regulatory environment will not stop those closures from happening. Electricity market rules simply do not value the reliability and resiliency attributes that fuel-secure baseload generators provide the grid.

The imminent closure of these plants will have far-reaching effects. First and foremost, the nation's power grid needs fuel-secure baseload power. Coal and nuclear fuel are abundant, reliable, affordable and not vulnerable and unpredictable conditions or emergencies that can disrupt the delivery of other fuels. Coal-fired power plants can stockpile several weeks' or months' worth of fuel on site; nuclear generators store enough fuel to last months or even years.

In the case of an extreme weather emergency, a coordinated attack or any significant disruptions to the fuel delivery infrastructure, fuel-secure baseload generators are the only ones capable of continuing operations. If fuel-secure baseload plants continue to be forced to retire, our power grid is likely to become overloaded or fail in the event of a sudden, extreme increase in demand.

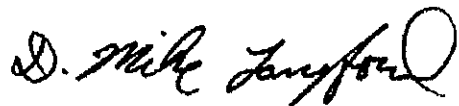
This is not merely a hypothetical situation: the 2014 polar vortex stretched the country's natural gas pipeline system well past its capabilities, resulting in skyrocketing prices and fuel shortages. These shortages during extreme cold temperatures could have been deadly, if not for fuel-secure baseload power plants that essentially carried the grid through the extended emergency. Many of the generators that were running full- out have since retired.

Experts agree. The North American Electric Reliability Corporation (NERC), which is responsible for establishing reliability standards for our grid, described the tenuous situation well in comments it provided to Secretary Perry's proposal. NERC said "Coal and nuclear generation generally have the unique attributes of low outage rates, high availability rates, and, with on-site storage, low fuel supply sensitivity necessary to provide secure and stable capacity to the grid. While their current benefits and potential are significant, non-synchronous

generation and natural gas-fired facilities do not currently replace the secure capacity provided by coal and nuclear generation.”

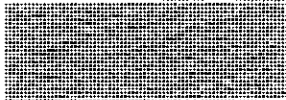
FERC’s failure to approve the DOE proposal to properly value the reliability and resiliency attributes uniquely provided by fuel-secure baseload generators could soon prove to be a catastrophic mistake. We do not have the luxury of kicking the can any farther down the road. Without immediate action to stop the imminent closure of fuel-secure baseload generators, our country will find itself confronted with a crisis that could have been prevented. This is not a question of if, but when.

I urge the White House to direct DOE Secretary Rick Perry to use the emergency powers under his authority to stop the coming closures of additional coal and nuclear plants across the country. This is the only way to prevent the impending disaster. The country cannot afford further delays. DOE must act right away.



Sincerely,
D. Michael Langford
National President
Utility Workers Union of America, AFL-CIO

CC: Hon. Rick Perry, Secretary of Energy



UTILITY WORKERS UNION OF AMERICA

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PRESIDENT

STEVEN VANSLOOTEN
EXECUTIVE VICE PRESIDENT

MICHAEL COLEMAN
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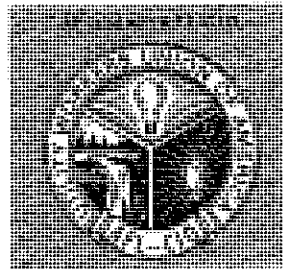
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May 12, 2017

The Honorable Rick Perry
Secretary of the U. S. Department of Energy

Via Email: Joe.Uddo@hq.doe.gov

Dear Mr. Secretary:

Unions, labor and power plant workers across the country applaud the Department of Energy's study examining electricity markets, the value of baseload power and the long-term security and resiliency of the electric grid. Baseload coal and nuclear power plants employ more than 154,000 workers, produce major infrastructure projects that put Americans to work, and support a resilient electric grid.

Baseload power plants have long been the "work horses" of the electric system, providing energy to customers 24 hours a day, 365 days a year. With significant on-site fuel reserves, they provide the resiliency required to keep electricity flowing under all circumstances since their operation is not subject to interruption by extreme events such as weather or attacks on infrastructure that disrupt fuel delivery to other generation resources. Recently, EPA Administrator Pruitt noted as much when he talked about the consequences of an attack on key infrastructure. Our nation's security is dependent on maintaining these plants to support a resilient supply of electricity.

However, numerous baseload power plants have permanently shut down in recent years, and many more are expected to close prematurely in the very near future. Once they are gone, they are gone for good. Baseload generation is under serious threat from market-distorting subsidies and mandates, regulations that target these resources, low natural gas prices and markets that don't value resiliency. We are at a crisis point. Further decline in the number of plants will not only impact the grid and national security, it will cost valuable jobs and discourage industrial development opportunities nationwide. This is an outcome America simply can't afford.

Our baseload power plants and the dedicated, skilled workers who operate them are the lifeblood of their communities. They deliver a strong tax base and support between three and eight times more high-paying jobs than do other forms of electricity generation. We depend on these plants to create a robust workforce, and the country depends on them to support a healthy economy and electricity supply.

Unless action is taken, the long-term viability of baseload power plants along with the jobs and substantial economic opportunities they bring is at risk. And, our national security could be compromised if we don't ensure a resilient grid. We encourage the Administration to take prompt and meaningful action to protect baseload power plants and America's energy future.

Sincerely,

D. Michael Langford
National President

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Grid Reliability and Resilience Pricing;
Proposed Rule

Docket No. RM18-1-000

**COMMENTS OF THE UTILITY WORKERS
UNION OF AMERICA, AFL-CIO**

On September 27, 2017, the Secretary of Energy notified the Federal Energy Regulatory Commission (“Commission”) by letter that, pursuant to authority under Section 403 of the Department of Energy Organization Act, he was proposing action by the Commission on a proposed rule to protect the resiliency of the electric grid (“proposal”). The Department of Energy (“DOE”) published the proposal on October 10, 2017.¹

Pursuant to the Commission’s notice in the above captioned docket inviting comments on the Secretary of Energy’s proposal, the Utility Workers Union of America, AFL-CIO (“UWUA”) respectfully submits for the Commission’s consideration the following comments. These comments reflect the UWUA’s experience that coal and nuclear electric generating units (“EGU”) provide reliability and resiliency attributes critical to the delivery of affordable, reliable, and resilient electric service.

DESCRIPTION OF UWUA

The UWUA is one of the most progressive unions in all of the labor movement. The UWUA has over 50,000 members working in the electric, gas, water, and nuclear industries across the United States.

¹ 82 Fed. Reg. 46940.

UWUA INTEREST IN THE PROPOSAL

For decades, UWUA members working at baseload coal and nuclear EGUs have brought significant value to the electric grid. Time and again, these EGUs, with their stable sources of on-site fuel, have kept the lights on when the grid is strained to the breaking point. The UWUA has a substantial interest in fixing outdated market structures that fail to capture the unique value provided by baseload coal and nuclear EGUs – and the UWUA members running them. Getting these markets right is not simply a matter of sound policy, it impacts our members' jobs and communities.

In the last seven years, 101,000 megawatts (“MW”) of coal-fired generating capacity has retired or has announced plans to retire.² In that time, five nuclear EGUs with a capacity of nearly 5,000 MW have closed, with another six nuclear EGUs currently projected to close in the next nine years.³ Workers at these EGUs have been hit hard. Since 2011, nearly 8,000 jobs have been lost in fossil fuel electric power generation,⁴ and nearly 6,500 nuclear power generation jobs lost during that same period.⁵ If baseload coal and nuclear generation EGUs are not

² AM. CLEAN COAL. FOR CLEAN COAL ELEC., RETIREMENT OF COAL-FIRED ELECTRIC GENERATING UNITS (June 11, 2017).

³ ENERGY INFO. ADMIN., *Three Mile Island is the Latest Nuclear Power Plant to Announce Retirement Plans* (June 13, 2017), <https://www.eia.gov/todayinenergy/detail.php?id=31612>.

⁴ ENERGY INFO ADMIN., *Power Sector Employment Declines, Except for Renewable Electricity Generators* (Dec. 19, 2014) <https://www.eia.gov/todayinenergy/detail.php?id=19271> (finding 1,750 jobs lost from Jan. 2011-June 2014) and compare BUREAU OF LABOR STATISTICS, *Quarterly Census of Employment and Wages, Private, NAICS 221112 Fossil fuel electric power generation, All Counties, July 2014*, https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm#type=1&year=2014&qtr=3&own=5&ind=221112&sapp=0 (99,294 jobs) and *Mar. 2017*, https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm#type=1&year=2017&qtr=1&own=5&ind=221112&sapp=0 (93,632 jobs).

⁵ ENERGY INFO ADMIN., *Power Sector Employment Declines, Except for Renewable Electricity Generators* (Dec. 19, 2014) <https://www.eia.gov/todayinenergy/detail.php?id=19271> (finding more than 4,900 jobs lost from Jan. 2011-June 2014) and compare BUREAU OF LABOR STATISTICS, *Quarterly Census of Employment and Wages, Private, NAICS 221113 Nuclear electric power generation, All Counties, July 2014*, https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm#type=1&year=2014&qtr=3&own=5&ind=221113&sapp=0 (47,239 jobs) and *Mar. 2017*,

properly valued for their services, thousands more workers are at risk of losing their jobs. Our members are skilled laborers who have specific expertise derived from long experience. The quality jobs they now have working in EGUs that are at-risk for closure are increasingly hard to find in their regions, let alone across the country. Absent Commission action, the jobs that our members at coal and nuclear EGUs stand to lose cannot be easily replaced.

Further coal and nuclear EGU retirements not only undermine our members' livelihoods, but also impact the communities in which they live. In 2012, a member of the Avon Lake, Ohio city council testified to Congress about the rippling harms that closure of the local EGU would have on the city.⁶ The resulting substantial reduction in collected income taxes would slice the emergency medical service operating budget in half.⁷ Closing the EGU would cut revenue for the Avon Lake City School District by nearly \$4 million a year – an 11% reduction.⁸ This would force the district to end programs, including those for students with special needs – such as for autism, depression, ADHD, and those suffering from the effects of trauma or abuse.⁹ The Avon Lake School District Superintendent said the loss of this revenue would be “devastating.”¹⁰ Absent Commission action, further coal and nuclear EGU closures will make it harder to pay for the schools, hospitals, and basic services that keep the communities in which our members live vibrant and healthy.¹¹

https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm#type=1&year=2017&qtr=1&own=5&ind=221113&supp=0 (45,554).

⁶ *Oversight: Review of the Environmental Protection Agency's Mercury and Air Toxics Standards (MATS) for Power Plants: Hearing Before the S. Comm. on Energy and Pub. Works, Subcomm. on Clean Air and Nuclear Safety*, S. HRG. NO. 112-963 at 78-86 (Mar. 20, 2012) (testimony of Rob James, Avon Lake City Council, Ward I).

⁷ *Id.* at 80.

⁸ *Id.* at 82.

⁹ *Id.* at 83.

¹⁰ *Id.*

¹¹ *Id.* at 85. See also Mark Haggerty, *Communities at Risk from Closing Coal Plants*, HEADWATERS ECON. (Mar. 2017), <https://headwaterseconomics.org/energy/coal/communities-coal-plant-closures/> (noting that the

Our members do not seek Commission action only for the sake of maintaining their jobs. Rather they know the value that their work brings to the electricity grid – because they have lived it. The on-site fuel at baseload coal and nuclear EGUs provides the electricity grid with reliability and resiliency characteristics that are unique across the fleet. This conclusion is not based on theoretical market models or complex algorithms, but on the experience of our members working day and night to run these EGUs. If baseload coal and nuclear EGUs shut down because they cannot capture the proper value for their irreplaceable benefits, then the markets have failed to maintain an affordable and reliable grid. Absent Commission action, the country is at imminent risk of losing coal and nuclear EGUs that provide critical reliability and resiliency attributes to the electricity grid.

Reliable electric service in many parts of the country is no longer based on requirements crafted by engineers and implemented by workers. Instead, it is entrusted to markets, designed by economists, that are heedless of any unpriced factor, even if the factor is a public necessity like resiliency. Electricity markets are supposed to be a means to an end – affordable, reliable, and resilient electric service. They are not an end themselves, and as a means, they aren't working.

The modern electricity grid is increasingly becoming a place where theory replaces experience. When experience shows theory to be wrong, the response is to ignore experience and tinker with theory, over and over again. This is electricity regulation that elevates market design over reliability. But reliability is a matter of public health and safety, and one we cannot afford to get wrong. We can crumple up a theoretical market design and start over. Critical

economic impacts of coal EGUs will be felt acutely locally, particularly in areas that have challenges such as poverty status, language barriers, and isolation from larger job centers).

infrastructure providing essential reliability attributes, once lost, is gone forever. It is time for the Commission to fix the problem, fix the markets, and continue the long tradition upheld by UWUA members of a reliable and resilient electricity grid.

COMMUNICATIONS

All communications, correspondence, and documents related to this matter should be directed to the following person:

D. Michael Langford
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UTILITY WORKERS UNION OF AMERICA, AFL-CIO
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COMMENTS

I. Baseload Coal and Nuclear EGUs Provide the Electric Grid With Crucial Reliability and Resiliency Attributes.

DOE's recent Staff Report on Electricity Markets and Reliability ("DOE Staff Report"),¹² as well as the Secretary of Energy's proposal, highlight the growing importance of the distinct but interrelated concepts of electricity reliability and resiliency. While defined in a number of ways, reliability essentially incorporates history to help design systems and equipment in a manner that mitigates generally known risk. Resiliency, on the other hand, accounts for an increasingly uncertain future, one with continuously evolving threat vectors that increase the potential for low probability, high consequence events. In this way, resiliency is a crucial element of reliability. As PJM Interconnection ("PJM") explains, resilience is "preparing for,

¹² STAFF REPORT TO THE SECRETARY ON ELECTRICITY MARKETS AND RELIABILITY (Aug. 2017).

operating through and recovering from a high-impact, low-frequency event. Resilience is remaining reliable even during these events.”¹³

Always-on baseload generation resources, historically coal and nuclear EGUs, provide essential reliability services critical to operating a reliable and resilient electricity grid. As the North American Electric Reliability Corporation (“NERC”) recently noted, these units “provide frequency support services as a function of their large spinning generators and governor-control settings, along with reactive support for voltage control. Power system operators use these services to plan and operate reliably under a variety of system conditions, generally without the concern of having too few of these services available.”¹⁴ While natural gas and other resources provide some of these services, a number of factors affect whether these resources are equipped and available to provide the full breadth of necessary reliability services.¹⁵

With high availability rates, low forced outages, and secured on-site fuel, coal and nuclear baseload EGUs are also critical to electric grid resiliency. NERC explained that “on-site fuel allow these units to operate in a manner independent of supply chain disruptions.”¹⁶ These attributes make coal and nuclear EGUs central to effective “fuel assurance,” or the ability to maintain operations independent of external delivery infrastructure or rapidly changing weather patterns,¹⁷ on the grid.

By contrast, natural gas EGUs do not store fuel on site. Rather natural gas is delivered to the EGU as needed for generation. Thus, disruptions at any phase of the natural gas supply

¹³ EVOLVING RESOURCE MIX AND SYSTEM RELIABILITY 37 (Mar. 30, 2017).

¹⁴ DOE Staff Report at 64 (citing letter from Gerry Cauley, President and CEO, NERC to Sec. of Energy Rick Perry, May 9, 2017 (“NERC Letter”).

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ PJM, EVOLVING RESOURCE MIX, , *supra* note 13 at 24.

chain, including production, processing, transportation in pipelines, or storage – all of which have seen disruption in recent years – will diminish or eliminate natural gas availability at the EGU. Furthermore, coal and nuclear fuel use is highly concentrated in the electricity subsector. Natural gas has many uses outside the subsector, including for manufacturing and – as was critical during the 2014 Polar Vortex – home heating. As many EGUs still lack firm contracts for the resource, natural gas unavailability presents an increasing vulnerability to the electric grid as generators become more reliant on natural gas. Natural gas brings benefits to the electricity grid, but the resiliency of on-site fuel is not one of them. Reliability elements are not choices on a menu. All of them must be maintained.

The loss of coal and nuclear EGUs has a substantial impact on fuel assurance attributes critical to electric grid resilience. Analysis by PJM found that even moderate retirements of these EGUs would reduce PJM's fuel assurance capability by almost 30% if the units were replaced by natural gas.¹⁸ That capability would be cut almost in half if capacity lost from high coal and nuclear generation retirement is replaced by natural gas, and by 60% if replaced by renewables.¹⁹ Such a loss could seriously undermine the ability of an otherwise reliable electric grid to withstand sudden shocks – natural or manmade. As PJM observes, “[h]istory has shown that, despite having a system that meets reliability standards and requirements, rare extreme events, such as those experienced in PJM and other parts of the world, may produce negative impacts to the system that threaten the ability to continue to deliver energy services.”²⁰ Based on this experience, PJM stress-tested 98 hypothetical generation portfolios, each deemed “reliable,”

¹⁸ *Id.* at 24.

¹⁹ *Id.*

²⁰ *Id.* at 33.

against a polar vortex event, and found that only 34 were also resilient.²¹ Notably, the vast majority of these 34 resilient portfolios had a high share of coal and nuclear generation.²²

II. Baseload Coal and Nuclear EGUs Were Critical to Reliable and Resilient Electric Service During the Polar Vortex.

PJM's stress test confirms what was already learned during the 2014 Polar Vortex. The electricity grid needs existing coal and nuclear EGUs to maintain reliable operation across all scenarios, including a high-impact, low-frequency event. Coal-fired EGUs – and the UWUA members operating them – stepped up to maintain crucial, needed power as temperatures dropped and electricity demand spiked. According to Commission staff, “data for January 2014 indicates that the sizable increase in electric demand was served from mostly coal-fired generation while natural gas-fired generation actually declined slightly between December 2013 and January 2014.”²³ Nuclear EGUs – already operating at nearly full capacity – continued to generate needed electricity at critical periods unaffected by the cold temperatures.

Coal was critical in preventing calamitous impacts on customers and the nation during the Polar Vortex. Yet, opponents have criticized forced outages at coal-fired EGUs during the Polar Vortex in an attempt to challenge coal's resiliency attributes. To the contrary, when put into context, these statistics make the case for coal resiliency stronger.

Forced outages occurred across all generation types during the Polar Vortex for a variety of reasons. For coal, the major issue turned out to be the Environmental Protection Administration's (“EPA”) Mercury and Air Toxics Standards (“MATS”). A substantial number

²¹ APPENDIX TO PJM'S EVOLVING RESOURCE MIX AND SYSTEM RELIABILITY 41 (Mar. 30, 2017).

²² *Id.*

²³ STAFF PRESENTATION FOR THE WINTER 2013-2014 OPERATIONS AND MARKET PERFORMANCE IN RTOS AND ISOS TECHNICAL CONFERENCE 9, Docket No. AD14-8-000, Apr. 1, 2014.

of forced coal outages within PJM occurred at EGUs slated for retirement due to MATS.²⁴ One analyst concluded that about half of coal-fired EGU outages “seems to be related to not maintaining units scheduled to imminently retire.”²⁵ In other words, forced coal-fired EGU outages during the Polar Vortex were more the result of the government’s “War on Coal” than any other factor. On the other hand, “[t]he concern related to gas plants is that as the grid becomes more reliant on gas, the shortcomings of the gas delivery system will increase unless ameliorated.”²⁶ As NERC concluded, “one of the largest issues that impacted gas-fired generation was the curtailment of fuel supply. Unlike coal and fuel oil, natural gas is not typically stored on site. As a result, generators rely on real-time delivery of natural gas from their suppliers. As natural gas is widely used outside the power sector, the demand from other sectors—in particular residential heating demand during cold winter weather—can critically affect the ability of pipeline operators and suppliers to deliver natural gas to the power sector.”²⁷

Indeed, the most prevalent cause of forced generation outage during the Polar Vortex was natural gas availability, far more so than any other issue. As temperatures plunged, demand for natural gas soared – so high that some of our members report being unable to procure any natural gas or oil to run dual-fueled plants. The numbers back such anecdotes. According to PJM, 24% of all forced outages resulted from natural gas interruptions.²⁸ By comparison, 15% of forced outages for all fuel types, including natural gas and coal, resulted from weather-related issues, a

²⁴ Letter from Craig A. Glazer, Vice President, Fed. Gov’t. Policy, PJM to Rep. Fred Upton, Chairman of the H. Comm. on Energy and Commerce 9 Fig. 6, Apr. 14, 2014.

²⁵ Judah Rose, *Waiting for the Next Polar Vortex*, FORTNIGHTLY MAGAZINE, June 2014.

²⁶ *Id.*

²⁷ NERC, POLAR VORTEX REVIEW 13 (Sep. 2014).

²⁸ PJM, ANALYSIS OF OPERATIONAL EVENTS AND MARKET IMPACTS DURING THE JANUARY 2014 COLD WEATHER EVENTS 25 (May 8, 2014).

category that includes frozen coal piles as well as many other issues.²⁹ This unavailability of natural gas, along with other factors, led to natural gas-fired EGUs having the highest forced outage rate during the Polar Vortex, fully 55% across all generator types.³⁰ Within PJM specifically, natural gas-fired EGUs accounted for 47% of forced outages, even though gas-fired EGUs comprised just 29% of the total available generation.³¹

Coal-fired EGUs were critical during the Polar Vortex to preventing load shedding that would have created a public health crisis as customers were left in the cold during freezing temperatures. Yet much of this capacity is now gone — along with the jobs behind it — and will not be available for the next grid emergency, whatever form it takes. American Electric Power (“AEP”) CEO Nicholas Akins testified to Congress that 89% of the generation retired by AEP because of MATS was called upon to meet demand during the Polar Vortex.³² As the *New York Times* summarized in a headline, “Coal to the Rescue, but Maybe Not Next Winter.”³³ The coal-fired EGUs that remain performed strongly during the Polar Vortex, but are now under great threat from grossly distorted markets. Their closure will exacerbate the greatest challenge posed to the electricity grid during the Polar Vortex — natural gas unavailability.

FERC should have addressed this problem aggressively three years ago. But better late than never.

III. There is Imminent Risk of Losing Resiliency Benefits Provided by Baseload Coal and Nuclear EGUs that Markets Do Not Properly Value.

²⁹ *Id.*

³⁰ POLAR VORTEX REVIEW, *supra* note 27.

³¹ 2014 COLD WEATHER EVENTS, *supra* note 28 at 25.

³² *Keeping the lights on - are we doing enough to ensure the reliability and security of the U.S. electric grid?: Hearing Before the S. Comm. on Energy and Nat. Res.*, S. HRG. NO. 113-271 at 58 (Apr. 10, 2014).

³³ Matthew L. Wald, Mar. 11, 2014 at B1.

A balanced and diversified portfolio of generation including a large share of coal and nuclear baseload EGUs is critical to providing essential reliability services, including the fuel assurance capability necessary for grid resiliency. However, these generating resources have been under unprecedented pressure in recent years, pushing the electric grid to a tipping point where it is at imminent risk of losing substantial resiliency attributes.

Unless action is taken to compensate generators for essential resiliency services in electricity markets, otherwise fully-functional baseload EGUs in electricity markets are at risk of closure at historic rates. In PJM alone, over the past three years, nearly 9,000 MW of coal-fired generation have retired, the equivalent of a dozen large power plants. Much of this capacity operated during the Polar Vortex and is no longer available to run in the event of system stress. Even more concerning, numerous baseload generating EGUs in PJM have announced that they are financially challenged and are closing or contemplating closure. As much as 16,000 MW of additional reliable baseload generating capacity – enough to power over 12 million homes – could retire over the next several years, leaving PJM without fuel-secure baseload resources.

Other markets are experiencing similar concerns. The New England Independent System Operator (“NE-ISO”) recently warned that between already-announced retirements removing 2,200 MW of non-gas-fired capacity, over 5,500 MW of additional oil and coal capacity at risk for retirement in coming years, and uncertainty surrounding the future of 3,300 MW from the region’s remaining nuclear EGUs, it was “skating by on the coldest days.”³⁴ NE-ISO came to an ominous conclusion that reverberates across electricity markets, “If a ‘perfect storm’ of problems were to occur, ISO system operators could be forced to use stronger measures, such as asking the

³⁴ 2017 REGIONAL ELECTRICITY OUTLOOK 27, 29.

public to conserve electricity or, in extreme cases, ordering controlled power outages. This risk increases after the upcoming generator retirements.”³⁵

No one should mistake these closures as simply a matter of economics. Let there be no mistake, as warned by the UWUA and other unions, as well as other stakeholders and experts, we are now feeling the reverberations of expensive EPA regulations. As far back as 2011, comments joined by the UWUA raised the alarm regarding potential coal-fired EGU closures and questioned EPA’s projections concerning MATS.³⁶ Our comments presented detailed analysis warning that 56,000 MW of coal-fired generation was at risk for closure due to MATS, compared to a risible EPA projection at that time of just 9,900 MW.³⁷ We further noted that “larger units may be closed in response to the rule due to site constraints, cost, or other considerations.”³⁸ Our projections were on the mark. The Energy Information Administration reported in 2014 that 60,000 MW of coal-fired generation was projected to close by 2018, with the vast majority retiring by the MATS deadline.³⁹ Now, saddled by control costs that were grossly underestimated by EPA,⁴⁰ larger coal EGUs face challenges in markets.

These regulatory pressures are being compounded by poorly designed electricity markets that fail to compensate baseload generation for reliability and resiliency services. This, in turn,

³⁵ *Id.* at 29.

³⁶ UNIONS FOR JOBS AND THE ENVIRONMENT, COMMENTS ON THE NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FROM COAL AND OIL-FIRED ELECTRIC UTILITY STEAM GENERATING UNITS AND STANDARDS OF PERFORMANCE FOR FOSSIL-FUEL-FIRED ELECTRIC UTILITY, INDUSTRIAL-COMMERCIAL-INSTITUTIONAL, AND SMALL INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS, EPA Docket No. EPA-HQ-OAR-2011-0044-4250 (Jul. 8, 2011).

³⁷ *Id.* at 13-14.

³⁸ *Id.* at 14.

³⁹ *AEO2014 Projects More Coal-Fired Power Plant Retirements by 2016 Than Have Been Scheduled* (Feb. 14, 2014), <https://www.eia.gov/todayinenergy/detail.php?id=15031>.

⁴⁰ See UNIONS FOR JOBS AND THE ENVIRONMENT COMMENTS, *supra* note 36 at 16-18 (“EPA Overestimates Reliance on Dry Sorbent Injection And Underestimates Unit Retirements”).

undermines diversity and erodes the electric grid's ability to respond to system-wide impacts like a polar vortex. As the DOE Staff Report noted, "[m]arkets need further work to address grid resilience. Market mechanisms are designed to incentivize individual resources rather than develop balanced portfolios."⁴¹

Maintaining resiliency services like fuel assurance capability was of little concern when wholesale market constructs were first designed, since the lowest cost generation sources at that time – baseload coal and nuclear EGUs – already incorporated high fuel assurance. Yet the quasi-governmentally designed and operated markets have failed to keep pace with rapidly-evolving factors, including low natural gas prices, environmental regulations, and federal subsidies for renewables, that have placed new pressure on reliable baseload generation with fuel on site.

Without the intervention proposed by DOE, Americans in electricity markets across the country face imminent risk of being left defenseless against the next major grid shock – whether resulting from a known or now-unknown threat. As NERC noted, "[p]lanning approaches, operational coordination, and regulatory partnerships are needed to assure fuel deliverability, availability, security (physical and cyber), and resilience to potential disruptions. Unfortunately, [such] an approach [is] not obvious in electricity markets today."⁴²

IV. Valuing Coal and Nuclear EGU Resiliency Benefits is Consistent With Market Evolution.

Notwithstanding their current state, electricity market constructs can be modified – as they are so frequently to accommodate a variety of purposes – to efficiently operate while compensating for reliability services. The DOE Staff Report notes that "[a] diverse resource

⁴¹ DOE Staff Study at 102.

⁴² *Id.* at 92 (citing NERC Letter).

portfolio could complement wholesale market products that recognize and compensate providers for the value of [essential reliability services] on a technology-neutral basis.”⁴³ This may be optimal for society. “There are tradeoffs between multiple desirable attributes for the electric grid. A more reliable and resilient system may be more costly than the least-cost system. Consumer life, safety and health are dependent on a reliable and resilient electric grid, making the grid a national security asset.”⁴⁴

Indeed, the Commission has intervened in the markets on numerous occasions in order to achieve reliability and other similar “extra-market” objectives. For example, the Commission recognized a flaw in the markets that could lead to a long-term shortage in electricity supply, and took action to remedy that flaw. Prior to 2006, the market incentives in PJM’s capacity markets were such that potential new generators could be incentivized to bid at a level below their actual cost of generation – generators that receive state subsidies, for example. In those instances, below-cost bids could skew downward the capacity auction clearing price, thereby discouraging the development of new generation and, ultimately, reducing the available supply of electricity.⁴⁵ In response, the Commission approved PJM’s Minimum Offer Price Rule, which establishes a price floor for new generators’ bids to protect against artificial suppression of the capacity markets.⁴⁶

This is consistent with many other instances of the Commission having identified and taken action to rectify market flaws that would impair the provision of affordable, reliable, and resilient electric service. Such actions include: (i) approval of several ISO-NE “Winter

⁴³ *Id.* at 91.

⁴⁴ *Id.* at 61.

⁴⁵ See *NRG Power Marketing v. FERC*, No. 15-1452, slip op. at 3-6 (D.C. Cir. 2017) (providing background on Minimum Offer Price Rule).

⁴⁶ *Id.*

Reliability Programs” – out-of-market solutions to ensure adequate fuel supplies for winter, which provided additional compensation for demand response, oil inventory, dual-fuel, and LNG resources;⁴⁷ (ii) requiring capacity markets to recognize transmission constraints through the inclusion of locational components, which generally results in the procurement of minimum quantities of capacity from local generating resources;⁴⁸ and (iii) approval of “make-whole” payments such as the Day-Ahead Margin Assurance Payment, which is aimed at addressing price volatility by compensating market participants for flexibility in their real-time electricity market offers.⁴⁹

In other words, the existing market structures have evolved over time, and a key part of that evolutionary process has been the identification of market flaws and the intervention by the Commission to address them. The Commission has historically recognized that the markets are a means to an end. To the extent that market designs and structures have failed to compensate adequately participants for valuable services provided in furtherance of that end, the Commission has responded appropriately by implementing mechanisms necessary to remedy those flaws in order to provide affordable, reliable, and resilient service.

Today, the failure of the markets to recognize and compensate adequately baseload coal and nuclear EGUs for the critical reliability and resiliency attributes they provide is simply another flaw that stands in the way of that objective. The Commission should intervene to ensure that the markets evolve once again to appropriately value these attributes, and thereby prevent customers from losing electricity when they need it most, rather than allowing the flaw to persist merely in the name of preserving a market purity that does not and has never existed.

⁴⁷ See, e.g., *ISO New England, Inc.*, 152 FERC ¶ 61,190 (2015).

⁴⁸ FERC, STAFF REPORT ON CENTRALIZED CAPACITY MARKET DESIGN ELEMENTS 15 (Aug. 2013).

⁴⁹ See, e.g., *Midwest Indep. Transmission Sys. Operator, Inc.*, 136 FERC ¶ 61,025 at PP 6-8 (2011).

V. The Commission Should Take Action to Ensure the Resiliency Benefits Provided by Coal and Nuclear EGUs are Properly Valued.

It is clear that the Commission should act and finalize the DOE proposal. As DOE has proposed, the Commission should require regional transmission organizations (“RTOs”) and independent system operators (“ISOs”) to amend their tariffs to ensure that the full reliability and resiliency benefits of existing coal and nuclear EGUs are recognized and fully compensated, and that markets do not lose those crucial reliability and resiliency attributes from the premature retirement of existing coal and nuclear facilities. To ensure that existing coal and nuclear EGUs are able to remain in the market, these units should be permitted to, as proposed by DOE, recover fully allocated costs, including but not limited to, operating and fuel expenses, costs of capital and debt, and a fair return on equity and investment.⁵⁰

The Commission’s action should focus solely on existing coal and nuclear facilities, because they are necessary components of a diversified portfolio of EGUs that retains the fuel assurance capability necessary for grid resiliency. Modified gas, hydroelectric, and other non-coal and non-nuclear EGUs cannot provide such diversity and fuel assurance, and including these facilities within the scope of the Commission’s action could undermine the achievement of the Commission’s reliability and resiliency objectives.

Consistent with prior interventions, the development of rules necessary to enact the tariff revisions for the implementation of the Commission’s action should be based, to the extent possible, on existing RTO/ISO mechanisms for the procurement of capacity and energy. Given the urgent need to address this issue and avoid the unnecessary loss of critical reliability and resiliency benefits through the premature retirement of coal and nuclear EGUs, the Commission

⁵⁰ 82 Fed. Reg. at 46948.

should not allow the needed intervention to be unduly procedurally delayed. Therefore, the Commission should require RTOs/ISOs to submit compliance filings in a timely manner.

WHEREFORE, for the foregoing reasons, UWUA asks that the Commission take actions in accordance with the positions asserted here.

Respectfully Submitted,



D. Michael Langford
National President
Utility Workers Union of America
AFL-CIO

October 17, 2017

Document Content(s)

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Troy, Angela (CONTR)

From: Frank Meznarich <fjmez@local270.org>
Sent: Friday, April 13, 2018 7:04 AM
To: AskOE
Subject: Energy Supply Emergency
Attachments: UWUA Local 270.pdf

It is becoming quite alarming at the rate that Nuclear and Coal Fired Generation plants across America are being shut down. The amount of mega-watts that are being removed for the grid due to closing both Nuclear and Fossil generation is one of National Security.

What plan is in place to supply electricity to millions of Americans? Gas is not the answer, there is not enough gas. Wind Power, not enough, solar, no and right on down the line. These Nuclear and Fossil Plants are vital to the electrification of America and our security as a nation.

These plants need to be compensated for the cost of their operation, they can't be shut down. Once they re they are gone for good, then what will you do?

I am asking that you do the right thing in the interest of the American People and National Security, issue an emergency order Pursuant to Federal Power Act Section 202 (c).

Attached is the comments that I previously sent

Thank You

Frank J Meznarich
President, Local 270 UWUA; AFL-CIO
1400 East Schaaf Road
Brooklyn Heights, OH 44131
Phone: (b) (6) Fax: 216-398-6158

"Labor is prior to, and independent of, capital. Capital is only the fruit of labor, and could never have existed if labor had not first existed. Labor is the superior of capital, and deserves much the higher consideration." ~ Abraham Lincoln

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LOCAL 270

UTILITY WORKERS UNION OF AMERICA

AFFILIATED WITH THE AFL-CIO

LIGHT-HEAT

1400 EAST SCHAAF ROAD



POWER-WATER

BROOKLYN HEIGHTS, OHIO 44131

TELEPHONE: (216) 398-6153

FAX: (216) 398-6158

October 19, 2017

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

Re: Grid Resiliency Pricing Rule
FERC Docket No. RM18-1-000

**COMMENTS OF THE UTILITY WORKERS UNION OF AMERICA, LOCAL
UNION 270 IN SUPPORT OF THE PROPOSED RESILIENCY RULE**

On September 28, 2017, the Department of Energy ("DOE") issued the "Grid Resiliency Pricing Rule" (the "Proposal") directing the Federal Energy Regulatory Commission ("FERC") to adopt a rule requiring operators of organized markets to "ensure that certain reliability and resiliency attributes of electric generation sources are fully valued." Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in Ohio will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

1



UWUA Local 270 strongly supports the Proposal and shares the Secretary's urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members' loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC has the requisite basis to act now. There is no time for delay. In addition to acting promptly, FERC should also direct organized market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Frank J. Mezunarich Sr.
President
UWUA Local 270
1400 East Schaff Rd., Brooklyn Heights, Ohio 44131
(b) (6)
fjmez@local270.org

II. DESCRIPTION OF UWUA LOCAL 270

UWUA Local 270 is a progressive labor organization that represents individuals in the Electric Utility, Generation and Water industries.

III. DESCRIPTION OF UWUA LOCAL 270'S INTEREST IN PROCEEDING

UWUA Local 270 is a party to a collective bargaining agreement with the owners of a nuclear power plant located in Ohio. As a result, the wages, terms and conditions of employment of its members may be directly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, UWUA Local 270 members have a direct and substantial interest in this proceeding. As well, the unique perspective of UWUA Local 270 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in Ohio's electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across Ohio. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in Ohio provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to UWUA Local 270 members. UWUA 270 has approximately 1,000 members including those who work at the Perry Nuclear Power plant and a coal plant in Avon, Ohio. The maintenance and capital improvement work on these plants also supports the local economy by creating thousands of well-paying union jobs for contractors during plant outages. In addition, these plants contribute millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services.

The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive economy in two ways. First, the preservation of certain plants will avoid the need to replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed, reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled (and specifically trained and experienced) employees, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

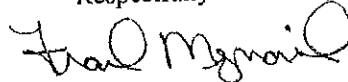
Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from

deactivation of the nuclear and coal-fired generating facilities in Ohio, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, UWUA Local 270 strongly urges FERC to adopt the rule proposed by the DOE as promptly and comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by the comments considered in this proceeding. FERC has thoroughly considered the impact of electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of pre-mature closures.

In acting promptly, FERC should also direct the organized market operators to issue a rule that is not only compensatory (and based on the regulatory language of the Proposal) but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

Respectfully submitted,



Frank Mezmarich
President
UWUA Local 270

Johnsen, Steven (MA)

From: The White House (b) (6)
Sent: Friday, April 13, 2018 1:46 PM
To: ES Central
Subject: Case # 20180330-15755301 for Shelley Wain has been assigned to you.



NEW CASE ASSIGNMENT NOTIFICATION

The following case has been assigned to you:
Contact Name: Shelley Wain
Case #: 20180330-15755301

Click on the link to access the case: [20180330-15755301](#)

The Office of Presidential Correspondence received the enclosed correspondence, which appears to fall within the jurisdiction of your agency. Please respond to the letter within 21 days. Should your agency be unable to respond within 21 days, please issue an interim response to the constituent, indicating that their correspondence has been received by your agency and that a final response will be forthcoming shortly. Please add this interim response to the case as an attachment. Do not close the case with this interim response.

Please indicate in the final response that the correspondence to the President, First Lady, or Vice-President was forwarded by the White House to your agency. In addition, please upload an informational copy of the response to this case for our records and mark the case "Closed – Response Attached." If your agency chooses not to respond, please mark the case "Closed – No Response," and indicate in the case notes the reason that the case should receive no response. Finally, if you think this case does not fall within your agency's jurisdiction, please re-assign by changing the Case Owner to AGL-Agency Redirect Needed. Please provide the name of the agency where you think this case properly belongs in the Case Comments.

Should you have any questions, please contact Richard Henry (b) (6)) or Dan Horning ((b) (6)).

Please let us know if you need anything else regarding this case.

Thank you.



White House Agency Liaison Casework

- [Close Window](#)
- [Print This Page](#)

Case: 20180330-15755301

Case Information

Contact Name	Shelley Wain	Case Owner	DOE Agency Representative
Contact Phone		Status	Assigned to Agency
Contact Email	(b) (6)	Agency Tracking ID	
Contact Address	(b) (6)	Agency Detail	

Description Information

Who are you trying to contact? Contact the President

Description Hi Mr. President,

We need help here in PA & OH. First Energy announced the shut down of Nuclear Power Plants in PA & OH. We need to keep our Nuclear Plants & not just rely on Natural Gas.

First Energy would like to protect consumers from this outcome & keep it's Nuclear Plants open by receiving "zero emission credits," which would appropriately compensate nuclear energy for not emitting carbon dioxide or other air pollutants. Illinois & NY approved similar measures to keep their nuclear plants running. Closing the reactors would almost certainly cost consumers in long run. The plants are struggling financially because price of natural gas has fallen so far that it is - for now - cheaper than the reactors, assuming you do not value clean air or reliability. The premature closing of nuclear plants would reduce PA & Ohio's energy diversity, worsen air pollution, & raise electricity prices. The problem is once the nuclear plants close, they cannot be restarted. The shutdown decision is permanent, even if historically low natural gas prices may not be.

Low natural gas prices have been a boom to industry & consumers. But why put all our eggs in one basket? Diversity in energy supplies hedges against unexpected shortages or price hikes in any one energy source. During the "polar vortex" of Jan 2014, for example, many natural gas & coal plants suffered outages just when electricity demand was surging to record levels. Meanwhile, operating nuclear power plants across country kept running at near-full capacity & helped avoid blackouts during some of the coldest weather in memory. Shutting down the reactors means consumers will be hit much harder when the unexpected happens. We should also consider the economic impact as well. The Plants contribute millions annually to PA & OH's economy, support thousands of jobs and producing millions in state and local tax revenues.

Please help so we can avoid this expensive mistake.

System Information

Case Origin	Contact Us	Assigned To Agency Date	4/13/2018 1:46 PM
Case Record Type	Agency Portal	Date/Time Closed	
		Assigned To Agency Age	0.0
		Age Alert	
		Priority	None
		Subject	

<https://45eop.force.com/casework/500t0000009TFIR/p?retURL=/casework/500t0000009T...> 4/13/2018

Contact Information

Contact Information

Name	Mrs. Shelley Wain	Email	(b) (6)
Middle Name		Phone	
Suffix			
Appellation			
Override Google Verification	<input checked="" type="checkbox"/>		

Address Information

Mailing Unit Type	Other Unit Type
Mailing Unit #	Other Unit #
Mailing Address (b) (6)	Other Address

Special Handling

Military Status
Military Branch
Rank

System Information

October 13, 2017

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

Re: Grid Resiliency Pricing Rule
FERC Docket No. RM18-1-000

**COMMENTS OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL
WORKERS, LOCAL UNION 272 IN SUPPORT OF THE PROPOSED RESILIENCY
RULE**

On September 28, 2017, the Department of Energy (“DOE”) issued the “Grid Resiliency Pricing Rule” (the “Proposal”) directing the Federal Energy Regulatory Commission (“FERC”) to adopt a rule requiring operators of organized markets to “ensure that certain reliability and resiliency attributes of electric generation sources are fully valued.” Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in Ohio will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

IBEW Local 272 strongly supports the Proposal and shares the Secretary’s urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members’ loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC has the requisite basis to act now. There is no time for delay. In addition to acting promptly, FERC should also direct organized

market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Vic Roppa
President
IBEW Local 272
838 Midland Avenue, Midland, PA 15059
(b) (6)
(b) (6)

II. DESCRIPTION OF IBEW LOCAL 272

IBEW Local 272 is a progressive labor organization that represents individuals working in the baseload generation industry.

III. DESCRIPTION OF IBEW LOCAL 272'S INTEREST IN PROCEEDING

IBEW Local 272 is a party to a collective bargaining agreement with the owner of a large baseload coal power plant located in Pennsylvania. As a result, the wages, terms and conditions of employment of our members may be directly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, IBEW Local 272 members have a direct and substantial interest in this proceeding. As well, the unique perspective of IBEW Local 272 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in Pennsylvania's electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across Pennsylvania. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in Pennsylvania provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to IBEW Local 272 members. The Bruce Mansfield generation station directly employs approximately 215 IBEW Local 272 members, and the maintenance and capital improvement work on this plant supports the local economy by creating hundreds of well-paying union jobs for contractors. In addition, this plant contributes millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive economy in two ways. First, the preservation of certain plants will avoid the need to replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed, reliable

facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled (and specifically trained and experienced) employees, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in Pennsylvania, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, IBEW Local 272 strongly urges FERC to adopt the rule proposed by the DOE as promptly and comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by the comments considered in this proceeding. FERC has thoroughly considered the impact of

electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of pre-mature closures.

In acting promptly, FERC should also direct the organized market operators to issue a rule that is not only compensatory (and based on the regulatory language of the Proposal) but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

Respectfully submitted,

Vic Roppa
President
IBEW Local 272

From: Martin Weblar
To: [AskOE](#)
Subject: Energy Supply Emergency Declaration Ability
Date: Sunday, April 15, 2018 9:14:59 AM

A factor to be considered in these decisions is the company's position relative to deregulation of portions of their utility business. Specifically, FirstEnergy decided how it would operate in the deregulated markets. Absent a natural or extraordinary disaster, FirstEnergy should not be afforded the benefits that would come from an energy supply emergency declaration, unless they would be willing to return the net financial benefits they received from their deregulated operations to their customers. Thank you.

From: David Aubrey
To: AskOE
Subject: 202(c) coal
Date: Sunday, April 15, 2018 11:16:13 AM

There is no need to bail out coal and nuclear power plants. Our electric grid can and will survive without them.

I am absolutely opposed to using section 202(c) to support uneconomic coal and nuclear power plants.

Rick Perry and Donald Trump are not fooling anyone. This has nothing to do with national security. It is a blatant handout to wealthy contributors who bet on the wrong technology.

From: Apophenia
To: [AskOE](#)
Subject: 202c bail-out of FirstEnergy
Date: Sunday, April 15, 2018 11:09:39 PM

Dear DOE,

FirstEnergy is not good at managing or operating utility assets. They, and Robert Murray, are asking for hand-outs -- and this after making large political donations to the current administration.

I would find it impossible to view a bail-out as anything other than bought-and-paid-for crony capitalism of the worst kind.

I strongly urge you to refuse the request.
sincerely,
Keith Campbell

From: Rob Donahue
To: [AskOE](#)
Subject: Section 202c
Date: Sunday, April 15, 2018 10:42:09 PM

To whom it may concern,

I strongly believe section 202c should solely be limited to disaster recovery purposes. By enabling the use of section 202c to bail out struggling, legacy energy sectors we are disregarding both natural market forces and poor business practices of those entities.

-Rob

Sent from my iPhone

From: J. Andrew Eichelberger
To: AskOE
Subject: Section 202(c)
Date: Sunday, April 15, 2018 10:56:48 PM

Please do not use FPA section 202(c) to aid First Energy. Keeping coal power plants running is not a matter of national security, particularly now, when there is no weather or war-related crisis involved.

Thanks-----Andy Eichelberger, Winchester, MA

From: Richard Giddeon
To: AskOE
Subject: 202(c)
Date: Sunday, April 15, 2018 1:29:22 PM

Hello,

My name is Richard Giddeon (b) (6)

I'm very familiar with both

forms of electricity production.

To me it is inconceivable that we would shut down the large base loaded generators such as nuclear and coal where the related fuel supply is located on site. During any emergency there is a substantial reserve of fuel ready to be converted to electricity in the form of coal in the coal yard and uranium in a reactor. In addition, the large generators provide stability to grid frequency simply because of the mass of the rotors in the generators. In the case of large nuclear plants these rotors typically weigh 200 tons. This rotating mass provides stability to the grid in a way that small generators do not.

The smaller gas turbines have two MAJOR flaws. First, they require a constant supply of gas from off site, in some cases from hundreds of miles away. Second they are generally much smaller and do not provide the frequency stability that the large generators provide to the grid. A disruption of the gas pipelines and associated infrastructure will cause immediate failure of the power grid in localized areas. The more dependent we become on Gas Turbines, the more the grid is likely to experience major disruptions related to fuel supply.

(b) (6)

implore the DOE to use whatever regulations are necessary to keep large scale power generation units with on-site fuel running to support the stability of the US Power Grid.

A large loss of power anywhere in the US at any time will constitute a National Emergency with horrendous negative results. i.e. see Puerto Rico after the 2017 Hurricane season.

Regards,

Richard Giddeon

From: Larry Glass
To: AskOE
Subject: Sustaining Nuclear Power
Date: Sunday, April 15, 2018 5:19:37 PM

Nuclear electric power generation is a non-polluting, stable source of power for the nations power grid. The notion that solar and wind power are suitable platform for a stable grid is questionable at best. Gas fired plants are economical at present, yet this is a commodity that can change in cost in the global market unpredictably.

I urge the DoE to step forward to assure we maintain the US Nuclear generating plants through at least the current licensing period to allow for a comprehensive review of the US grid and future electrical power requirements.

Larry Glass
(b) (6)

From: Mark Hattersley
To: [AskOE](#)
Subject: Use of Federal Power Act - Let the Market Decide!
Date: Sunday, April 15, 2018 1:15:32 PM

Dear DOE:

My Subject line says it all.

We are not facing an energy emergency. Do not prop inefficient components of our energy supply. In the long run, it will cost us all much more than is immediately apparent. Let the market pick the winners here.

Thank You.

Mark C Hattersley
(b) (6)

From: (b) (6)
To: AskOE
Subject: FirstEnergy Request for Emergency Order
Date: Sunday, April 15, 2018 5:15:51 PM
Attachments: [Attachment 1 - Stephen Huntton Comments in FERC RM18-1-000.pdf](#)
[Attachment 2 - Comments of Bipartisan Former FERC Commissioners in RM18-1-000.pdf](#)
[Attachment 3 - Comments of PJM Interconnection in RM18-1-000.pdf](#)
[Attachment 4 - FERC Order on Secretary's Proposal.pdf](#)
[Attachment 5 - White House and DOE Agree Evidence Does Not Warrant Use of Section 202\(c\).pdf](#)
[Attachment 6 - Coal CEO Says Bailout No Longer Needed - WSJ - 4-13-2018 - page B5.pdf](#)
[Attachment 7 - Utility Says Power Plants Will Stay Open During Bankruptcy - Ohio News - US News.pdf](#)
[Attachment 8 - FirstEnergy Solutions bankruptcy could take years; consumer impact review begins.pdf](#)
[Attachment 9 - Generator Deactivation Notices in PJM.xlsx](#)
[Attachment 10 - U.S. Coal Mogul Murray Wants to Run Power Plants Too - Bloomberg.pdf](#)
[Attachment 11 - AEP Ohio Answers.pdf](#)

Dear Secretary of Energy and Department of Energy,

I respectfully submit these comments urging the Secretary and Department to deny the FirstEnergy petition.

Key Considerations Established in My Attached Comments

The FirstEnergy request is substantively similar to the Secretary's proposal to the independent Federal Energy Regulatory Commission (except the FirstEnergy request is limited to PJM Interconnection, L.L.C., for no apparent reason other than FirstEnergy's plants happen to be in PJM). My comments (Attachment 1) to the FERC are relevant to the FirstEnergy request, and those comments established among other things:

- The Secretary's proposal would potentially subsidize tens of gigawatts of uneconomic plants, and cost consumers many tens of billions of dollars a year.
- These subsidies would crash market prices and force economic plants on to federal subsidies as well, thus ending the organized markets.
- Retiring plants have three times the forced outage rate of the new plants that the Secretary's proposal would forestall. Thus, the proposal would undermine grid reliability.
- Natural gas supply was not the major problem in the Polar Vortex as PJM data and testimony demonstrate.
- A 90-day (or 25-day) fuel supply requirement has no rational basis. In the Polar Vortex, for example, PJM generation emergencies aggregated 20 hours – less than two days.
- Following the Polar Vortex, PJM strengthened its capacity market to reward performance and penalize nonperformance and has not had a single system generation emergency in more than three years.
- The chance of a generation deficiency in PJM is much less than 1 in 5,000, based on data compiled by ReliabilityFirst Corporation, the regional entity responsible for overseeing PJM reliability.
- If that less than 1 in 5,000 deficiency were to occur it is unlikely to be due to a fuel supply emergency, as Rhodium Group data demonstrate, and unlikely to result in a customer outage due to system reliability tools at PJM's disposal.
- If the FERC were to go forward with subsidizing certain resources for an unimportant quality like fuel supply on site, it should recognize important qualities like environmental/public health damage. Because coal generation causes environmental/public health damage averaging \$32/MWh according to the National Research Council, coal plants would be assessed \$32/MWh for their generation, subtracted from whatever revenues they otherwise receive.

Comments of Former FERC Chairs and Commissioners

In the FERC proceeding a bipartisan group of former FERC Chairs and Commissioners, appointed by every President since Ronald Reagan, submitted comments (Attachment 2) opposing the Secretary's proposal, saying in summary:

The published proposal in this Docket would be a significant step backward from the Commission's long and bipartisan evolution to transparent, open, competitive wholesale markets. Pursuing the worthy goal of a resilient power system, the Commission's adoption of the published proposal would instead disrupt decades of substantial investment made in the modern electric power system, raise costs for customers, and do so in a manner directly counter to the Commission's long experience.

Comments of PJM

As the Secretary and Department are aware, PJM is the independent regional transmission organization responsible for operating and planning a reliable grid across 13 states and the District of Columbia. PJM submitted extensive comments (Attachment 3) stating as relevant here (page 14):

The evidence and events that the DOE NOPR cites do not support its assertion of a resilience crisis or its rationale for degrading competitive markets in the name of fuel resilience. As experience during extreme weather events has shown, myriad factors contribute to outages, and fuel security, while beneficial, provides no guarantee of resilience during such events. Given the paucity of evidence to support its expensive and anticompetitive cost of service guarantee, the DOE NOPR appears aimed less at truly addressing resilience concerns and more at benefitting certain preferred generators and fuels and the industries they support. ... the DOE NOPR offers nothing to show that market regions in general, or the PJM Region in particular, is in any danger of failing to meet reliability or resource adequacy requirements now or in the future. This is not surprising, as the PJM Region unquestionably is reliable, and its competitive markets have for years secured commitments from capacity resources that well exceed the target reserve margin established to meet NERC requirements. And the PJM capacity market also includes rigorous performance requirements, enforced by market mechanisms—which were affirmed just this year by a U.S. Court of Appeals.

FERC Order

As the Secretary and Department are aware, the independent FERC is the federal agency responsible for grid reliability and for just and reasonable wholesale rates. Four of the five sitting Commissioners were appointed by President Trump.

FERC unanimously rejected the Secretary's proposal (Attachment 4), stating: "... the extensive comments submitted by the RTOs/ISOs do not point to any past or planned generator retirements that may be a threat to grid resilience." (paragraph 15).

Specifics on the Emergency Claim

As the Secretary and Department are aware, there is a very high bar for exercise of emergency authority under Section 202(c) of the Federal Power Act.

The White House and the Department determined last year that the evidence did not warrant use of this emergency authority, stating (Attachment 5):

We look at the facts of each issue and consider the authorities we have to address them, but with respect to this particular case at this particular time, the White House and the Department of Energy are in agreement that the evidence does not warrant the use of this emergency authority.

There has been no material change in circumstances since the White House and Department

determined that use of emergency authority was not warranted.

Indeed, Robert Murray, CEO of Murray Coal, the co-advocate with FirstEnergy at the FERC and elsewhere, now states per the attached article (Attachment 6) that there is no need for a bailout. The FERC, PJM, and countless industry analysts have said that there is no emergency. As PJM discussed in its comments it has commitments for generation resources for more than three years ahead that are much greater than forecasted peak demand. And additional efficient, reliable resources are being added every year.

Moreover, subsequent to its filing with the Secretary and Department, FirstEnergy informed the bankruptcy court that all of its nuclear and coal plants will continue operating during its bankruptcy proceeding, as reported in the attached article (Attachment 7): "Attorneys for FirstEnergy Solutions say the company's coal and nuclear power plants will keep producing electricity while the company undergoes reorganization under bankruptcy."

That bankruptcy proceeding will take years, as reported in the attached article (Attachment 8). A local bankruptcy expert is quoted as saying "'It can take, on the short end, five or six years [to resolve]. I would think it can take longer than that'" said Joseph Ferrise, staff attorney for the downtown Akron office of the Chapter 13 trustee, who oversees local individual bankruptcy cases." Thus, the FirstEnergy plants will not be retiring for the foreseeable future.

Contrary to FirstEnergy's claim that there is a rising tide of coal and nuclear retirements, there have been relatively few deactivation (retirement) requests recently submitted to PJM – other than by FirstEnergy (Attachment 9). And, as noted above, notwithstanding those deactivation notices submitted by FirstEnergy, none of the FirstEnergy plants will actually be retiring for the foreseeable future.

In addition, Mr. Murray states (Attachment 10) that he is looking to buy FirstEnergy plants which he says he can operate better than FirstEnergy. Mr. Murray's comments support the propositions that (1) there are buyers for these plants and (2) FirstEnergy's problems are of its own making.

Any Emergency Would Be a National Emergency

If the Secretary and Department find there is an emergency in PJM, which has commitments for ample generation resources more than three years into the future, then there must be emergencies in all the other organized markets. And there may be emergencies in the rest of the United States, wherever state regulators have not mandated the quantity and mix of generation resources that the Secretary and Department deem necessary for non-emergency conditions. As the Secretary and Department are aware, many coal plants have retired outside of the organized markets and continue to do so.

Consequently, if the Secretary and Department were to find there is an emergency in PJM it would be imprudent for the Secretary and Department to exclude any part of the United States from an emergency order. In addition, the Secretary and Department should request Congress to pass legislation on an emergency basis to extend the jurisdiction of Section 202(c) to Texas, Hawaii and Alaska so that the emergency order can apply to those states as well.

Selection of, and Compensation for, Coal and Nuclear Plants

If, against facts and law, the Secretary and Department determine to exercise emergency authority it would present the question of selecting and compensating the plants to be subsidized.

Section 202(c) is part of the Federal Power Act, which states in Section 205(a) that "All rates and charges made, demanded, or received by any public utility for or in connection with the transmission or sale of electric energy subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges shall be just and reasonable, and any such rate or

charge that is not just and reasonable is hereby declared to be unlawful.”

There is no exception for emergency orders under Section 202(c) which itself says that the terms, including compensation, shall be “just and reasonable.” “Just and reasonable” has been interpreted for decades as meaning the lower reasonable cost consistent with the maintenance of adequate service.

It would be unjust and unreasonable to compensate any coal and/or nuclear plants beyond the minimum amount of capacity deemed necessary to alleviate the purported emergency, and it would be unjust and unreasonable to provide compensation beyond that necessary to keep that minimum amount of capacity from retiring. To ensure the lowest reasonable cost that minimum amount of capacity should be acquired in a competitive auction among entities that PJM and the PJM Market Monitor determine would otherwise retire absent subsidy. An auction also ensures that to the extent an entity is erroneously deemed eligible it would tend to bid low for subsidies.

As for FirstEnergy in particular, it was paid \$6.9 billion in “stranded costs” by consumers in return for transitioning to a competitive market, as reported in the attached Q&A by the utility AEP Ohio (Attachment 11). It would be an unjust and unreasonable windfall for FirstEnergy to keep the stranded cost payments and get paid again with out-of-market subsidies. Therefore, to the extent FirstEnergy plants elect to offer their capacity for potential subsidy, it should be a condition of their eligibility that stranded cost payments of \$6.9 billion (plus interest) be deducted from what FirstEnergy would otherwise be paid. When consumers have been fully reimbursed for their stranded cost payments FirstEnergy plants could begin receiving auction revenue.

Thank you for your consideration of these comments.

Respectfully submitted,

Stephen L. Huntoon

(b) (6)

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Grid Reliability and Resilience Pricing

)

Docket No. RM18-1-000

**COMMENTS OF
STEPHEN L. HUNTOON**

Pursuant to the *Federal Register* notice of proposed rulemaking published by the Commission on October 10, 2017, the undersigned hereby respectfully submits these comments on the U.S. Department of Energy proposal (DOE proposal) in this proceeding.

I have practiced energy regulatory law for 35 years, served as a former President of the Energy Bar Association, and been involved in most of the major regulatory initiatives of the Commission involving the electric industry. A short biography is provided in Attachment A.

I have written three columns on the DOE proposal which have been published in *RTO Insider*. These columns are provided in Attachment B and are incorporated herein by reference.

Some key points from those columns:

- The DOE proposal would potentially subsidize tens of gigawatts of uneconomic plants, and cost consumers many tens of billions of dollars a year.
- These subsidies would crash market prices and force economic plants on to federal subsidies as well, thus ending the organized markets.
- Retiring plants have three times the forced outage rate of the new plants that the DOE proposal would forestall. Thus, the DOE proposal would undermine grid reliability.
- Natural gas supply was not the major problem in the Polar Vortex as PJM data and testimony demonstrate.

- A 90-day fuel supply requirement has no rational basis. In the Polar Vortex, for example, PJM generation emergencies aggregated 20 hours – less than two days.
- Following the Polar Vortex, PJM strengthened its capacity market to reward performance and penalize nonperformance and has not had a single system generation emergency in more than three years.
- The chance of a generation deficiency in PJM is much less than 1 in 5,000, based on data compiled by ReliabilityFirst Corporation, the regional entity responsible for overseeing PJM reliability.
- If that less than 1 in 5,000 deficiency were to occur it is unlikely to be due to a fuel supply emergency, as Rhodium Group data demonstrate, and unlikely to result in a customer outage due to system reliability tools at PJM's disposal.
- If the Commission goes forward with subsidizing certain resources for an unimportant quality like fuel supply on site, it should recognize important qualities like environmental/public health damage. Because coal generation causes environmental/public health damage averaging \$32/MWh according to the National Research Council, coal plants would be assessed \$32/MWh for their generation, subtracted from whatever revenues they otherwise receive.

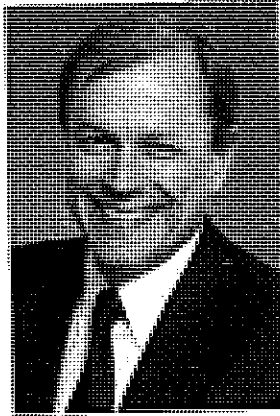
For these reasons I respectfully request that the Commission not adopt the proposed rule.

Respectfully submitted,

/s/ Stephen L. Huntoon
 Stephen L. Huntoon
 1629 K Street, N.W., Suite 300
 Washington, D.C. 20006
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October 23, 2017

Attachment A



Steve Huntoon

Steve Huntoon is the principal of Energy Counsel, LLP, www.energy-counsel.com. He is a former President of the Energy Bar Association, the bar organization of more than 2,400 energy attorneys and professionals.

Over 35 years practicing energy law, Steve has advised and represented many energy companies, including Dynegy, PECO Energy (an Exelon company), Florida Power & Light (a NextEra Energy company), ISO New England, Entergy, PacifiCorp, Williston Basin (an MDU Resources company) and PHI/Conectiv (an Exelon company).

His industry roles have included:

- reliability standard development and compliance,
- generator interconnection,
- PJM and New England energy and capacity markets,
- first commercial wind project in the eastern U.S. at Hazelton, PA, and first coastal wind project in the eastern U.S. at Atlantic City, NJ,
- retail electric and natural gas marketers, and
- restructuring of electric utilities and gas pipelines under FERC Orders 888 and 636, respectively.

Steve is a regular contributor to *RTO Insider*, tackling cutting-edge issues such as microgrids, electric cars, rooftop solar, home and grid batteries, competitive transmission, generator interconnection, grid reliability, economics of new and existing nuclear plants, transition to 100% renewable energy, LED lighting, Standard Market Design, and subsidy of coal and nuclear plants.

He received his B.A., with honors, from the University of Virginia in 1978, and his J.D. from the University of Virginia Law School in 1982. He is a member of the District of Columbia Bar.

Attachment B

COUNTERFLOW

BY STEVE HUNTOON

Cash for Clunkers Redux

By Steve Huntoon

Remember the Cash for Clunkers program? Inefficient cars paid to go away.

The Energy Department's directive to FERC last week is Cash for Clunkers with a twist: inefficient generators paid to stay.

The original Cash for Clunkers was an economic stimulus for new stuff to replace the old stuff. The DOE's Notice of Proposed Rule-making subsidizes the old stuff to stop the new stuff: a sort of stimulus in reverse. (See related story, Perry Orders FERC Rescue of Nukes, Coal, p.1.)

So we might say the DOE version is a Twisted Sister sort of twist on the original.

Bailing Out the Retiring, Retired and Canceled Clunkers, and then Everyone Else

We know with certainty that the DOE proposal subsidizes the inefficient because those are the plants that will opt for the federal rate guarantee instead of market-based rates. How will this play out?

DOE says there are 34 GW in projected retirements over the next five years. Under the DOE proposal, none of that would retire and instead would go on the federal dole.

And then there's the 71 GW that already retired over the last six years but will likely return, like "Night of the Living Dead," for that federal rate guarantee.¹

And how about all those canceled nuclear projects?

So we'll have around 100+ GW of uneconomic clunkers crashing the markets, and of course crashing market prices. This will force all the economic plants that depend on legitimate market prices to join the federal dole.

Natural gas plants will do this by simply adding 90 days' worth of oil tanks.²

What will all this cost consumers? DOE doesn't even try to answer that question, but here's one way of looking at it. First, we can assume that FERC won't want thou-



Huntoon

sands of individual rate cases for all the power plants in all the RTOs.³

So FERC would need some sort of standard compensation. Let's say it adopts a cost of new generation, maybe \$400/MW-day.⁴ Generation in the RTOs is around 530 GW; add the roughly 70 GW of retired clunkers that will return from the dead, for about 600 GW on the federal dole. That's about \$88 billion annually.

So we are talking about tens of billions of dollars a year squandered first on what are, by definition, uneconomic resources, and then by paying economic resources that are rendered uneconomic by the clunkers and forced onto the same federal dole.

I can't help noting how Republicans blasted the original Cash for Clunkers,⁵ which had a one-time cost of \$3 billion. The DOE version is tens of billions of dollars every year, forever.

Resiliency

DOE says that its proposal is about "resiliency" (the new buzzword for reliability). But the retiring plants really are clunkers, as this PJM slide excerpt illustrates (I'll translate the jargon after the slide):⁶

Drop in Weighted Average EFORD Projected for 2021 is due to:

- Large amount of deactivations with high EFORD (7,150 MW with 14.56% Weighted Average EFORD).
- Large amount of additions with low EFORD (10,980 MW with 4.42% Weighted Average EFORD). Additions include only those queue projects that have executed an Interconnection Service Agreement.

| PJM

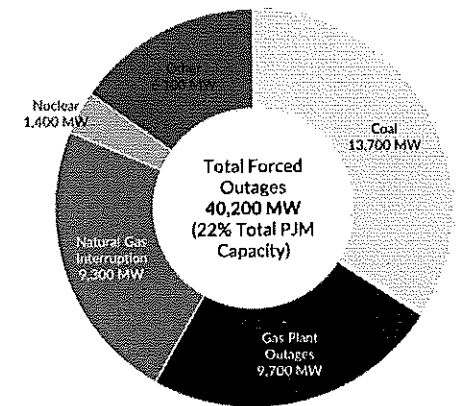
The deactivating (retiring) stuff has an outage rate — equivalent forced outage rate-demand (EFORD) — that is three times the new stuff (14.56% versus 4.42%). Yet DOE wants to subsidize these clunkers so they won't retire.

And that somehow is going to improve resiliency, again in a Twisted Sister sort of way.

90 Days of Fuel Supply on Site

A few words about the fuel supply require-

ment. DOE relies heavily on PJM's experience in the polar vortex of 2014 and claims that natural gas supply was the major problem. It was not. As this PJM chart plainly shows, natural gas interruptions affected 9,300 MW, accounting for less than 25% of total forced outages of 40,200 MW:⁷



| PJM

The FERC testimony of Mike Kormos, PJM's executive vice president at the time, directly contradicts DOE's main claim: "Natural gas interruptions removed less than 5% of the total capacity required to meet demand on Jan. 7, [2014], while equipment issues associated with both coal and natural gas units made up the far greater proportion of forced outages."⁸ (Emphasis added.)

Beyond equipment issues, another basic flaw in a metric like fuel supply on site is that coal piles freeze, as some did in the polar vortex. Years of coal supply on site would be worthless if frozen. And of course, nuclear plants can't run during refueling and other outages. Years of nuclear fuel on site would be worthless during those outages.

Here's a fun fact you won't find in the DOE NOPR: Baseload (combined cycle) natural gas plants average lower forced outage rates (4.29%) than baseload coal plants (7.71%), and have about the same as nuclear plants (3.51%).⁹ It's these overall forced outage rates that matter — not a single metric like fuel supply on site.

As for 90 days specifically, DOE provides zero rationale for that. In the polar vortex, the generation emergencies in PJM aggregated 20 hours.¹⁰ What is magic about 90 days (other than being tailored to the average coal plant stockpile)?

Continued on page 4

DOE-17-0427-B-001358

COUNTERFLOW

BY STEVE HUNTOON

Cash for Clunkers Redux

Continued from page 3

FERC and RTOs like PJM have learned from the polar vortex to reward performance and penalize nonperformance, instead of using a meaningless metric like days of fuel supply on site.

PJM hasn't had a single system generation emergency in more than three years — that's more than 26,280 hours of reliable operation. And PJM locks down adequate, reliable generation resources years in advance.

Bottom line: DOE proposes to take a system that is incredibly reliable and squander tens of billions of dollars on uneconomic resources to make it less reliable.

J&R Gone Missing

Absent from the DOE NOPR is an explanation of how its proposal would satisfy the lodestar requirement of the Federal Power

Act that all rates be just and reasonable.¹¹

Subsidizing uneconomic clunkers in organized markets is the antithesis of just and reasonable rates. It would be a repudiation of everything that FERC has sought to accomplish over the last 25 years.

Maybe Rick Perry was right all along: DOE should be abolished.

Steve Huntoon is a former president of the Energy Bar Association, with 30 years of experience advising and representing energy companies and institutions. He received a B.A. in economics and a J.D. from the University of Virginia. He is the principal in Energy Counsel, LLP, www.energy-counsel.com.

¹ If you're one of those owners, you might want to hold the wrecking ball. Or come to think of it, maybe you wouldn't: more rate base if you wreck and rebuild.

² The *Wall Street Journal* cites unidentified experts for the notion that on-yuclear and coal plants will qualify under the DOE proposal. That is wrong. Installing oil storage at natural gas plants is routinely done. Of course, if rate base becomes the game, LNG tanks would be used instead.

³ PJM alone has about a thousand generating units that do or could qualify for the federal rate guarantee. <http://pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2020-2021-rpm-resource-mode.ashx? a=en>.

⁴ There's a straight-faced argument for that: If new generation investment costs that much, existing generation should be compensated at the same level. Otherwise we would be incenting existing generation to retire that would cost less to keep around than paying for replacement new generation.

⁵ <https://www.seattletimes.com/nation-world/cash-for-clunkers-in-trouble-politics-or-prudence/>. "Senate Republican leaders rallied against the program Monday, calling it a mode of government inefficiency and out-of-control spending."

⁶ [http://pjm.com/-/media/committees-groups/committees/mrc/20170928/20170928-item-07-2017-irm-study-presentation.ashx \(slide 7\)](http://pjm.com/-/media/committees-groups/committees/mrc/20170928/20170928-item-07-2017-irm-study-presentation.ashx (slide 7)).

⁷ [http://pjm.com/-/media/library/reports-notices/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-coal-weather-events.ashx \(page 26\)](http://pjm.com/-/media/library/reports-notices/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-coal-weather-events.ashx (page 26)).

⁸ <https://e.library.ferc.gov/idmws/common/opennat.asp?fileID=13502869>, (page 11, n. 4).

⁹ [http://www.nerc.com/pa/RAPA/gads/Pages/Reports.aspx \(click on Brochure 4 for 2012-2016 and compare EFORd \(column AC\) for the fuel types\)](http://www.nerc.com/pa/RAPA/gads/Pages/Reports.aspx (click on Brochure 4 for 2012-2016 and compare EFORd (column AC) for the fuel types)).

¹⁰ <http://pjm.com/-/media/committees-groups/committees/e/c/postings/performance-assessment-hours-2011-2014-x.sashx? a=en>.

¹¹ DOE gives lip service to the statutory requirement by using the term "just and reasonable" twice in its proposed regulation. It's like saying "bring me a bue rock that is red."

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COUNTERFLOW

By STEVE HUNTOON

Anatomy of the New Cash for Clunkers

By Steve Huntoon

Those of us who dwell in the economic/regulatory/public policy realm wonder about the origins of atrocious public policy. Where did it come from? Whose awful idea was this?

In the case of the Department of Energy's Cash for Clunkers proposal, we pretty much know.

Robert Murray, owner of the coal mining company Murray Energy,¹ was a large fundraiser for candidate Donald Trump during the campaign.² After the election, Murray had a couple of meetings with President Trump at which the president promised Murray to do whatever he (and FirstEnergy) wanted Trump to do. I'm not making this up.³ (See excerpt, right.)

What Murray wanted was for Rick Perry, the secretary of energy, to declare an emergency on the electric grid so that FirstEnergy would keep buying a lot of coal from Murray's coal mining company. Again, I'm not making this up.

Now it seems that pesky government lawyers figured out that the supposed basis for such an action, Section 202(c) of the Federal Power Act, couldn't possibly justify that. "The White House and the Department of Energy are in agreement that the evidence does not warrant the use of this emergency action."⁴

At this point, a lot of us naively assumed it was safe to go back about our business. We were wrong.



Huntoon



ROBERT E. MURRAY
Chairman, President &
Chief Executive Officer

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August 1, 2017

Mr. John D. McEntee III
Special Assistant and Personal Aide to the President
The White House
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20502
jdmcentee@WHOWHOP.GOV

Dear Mr. McEntee:

Last evening in Huntington, West Virginia, after President Donald Trump met briefly with Mr. Charles E. Jones, Chief Executive Officer of FirstEnergy Corporation, and the undersigned, he turned to you and said "teli Cohn to do whatever these two want him to do".

Somebody came up with Plan B (or more like Plan 9) of using an even more obscure federal statute to tell FERC to have a rulemaking to subsidize the coal and nuclear clunkers in the country. So here we are.

It's as simple and sad as that.

¹You may remember Robert Murray from the Crandall Canyon Mine collapse in which six miners and three rescuers perished, <http://www.nytimes.com/2008/05/09/us/08cnd-mine.htm>; <http://www.cnn.com/2008/US/07/24/mine.collapse/index.htm>.

²<http://thehill.com/policy/energy-environment/284261-coal-executive-to-host-fundraiser-for-trump>; <https://www.opensecrets.org/news/2017/02/murray-energy-record-giving-2016/>.

³<https://assets.documentcloud.org/documents/3936141/Murray-s-letters-to-Trump-administration.pdf>.

⁴<https://www.eenews.net/stories/1060059081>.



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COUNTERFLOW

BY STEVE HUNTOON

More Smoking Guns for the Clunkers

By Steve Huntoon

My last coupé of co umns have explored the Department of Energy's "Cash for Clunkers" proposal. The first co umn discussed how it will cost tens of billions of dollars and subsidize less reliable generating resources to suppress more reliable resources.¹ The second co umn showed that the proposal is the direct result of meetings between President Trump and Robert Murray, coal mine owner and major fundraiser for the president's campaign,² not some deliberative process involving well-informed, well-intentioned people.



Huntoon

Robert Murray's Confirmation

A shout-out to Murray for providing a smoking gun one day after my last co umn ran, confirming that the DOE proposal is about selling more of his coal to FirstEnergy power plants, one way or another.³

1 in 5,000, and Then Some

Some folks may still think that the situation can't possibly be that outrageous. The DOE proposal can't be that devoid of merit.

Wrong.

The smoking gun below is from ReliabilityFirst, the regional reliability organization responsible for reliability in the Mid-Atlantic and Midwest states (the states that are the focus of the DOE

proposal).⁴

Please bear with me in explaining this graphic. It is displaying the winter. The leftmost co umn is showing generating resources. The next co umn is showing possible reduction in those resources due to resource outages, based on the last five winters (including the polar vortex). The percentages on the left are the chance of cumulative outages exceeding the associated outage quantity.⁵

The biggest cumulative reduction in resources has a 0.2% chance of occurring. That is one in 500.

OK, now skip the 50/50 Demand co umn and look at the 90/10 Demand co umn. That reflects a one-in-10 chance of the coldest weather.

Please note that resources at a one-in-500 worst case (the second co umn) are still much more than the peak demand in the one-in-10 worst case (the last co umn).

In other words, combined there is much less than a one-in-5,000 (500 x 10) chance of peak demand exceeding resources in the winter.

And there's more!

What if that less-than-one-in-5,000 situation were to occur? Fuel supply interruption is unlikely to be a major factor.⁶ And RTOs like PJM have too much to avoid customer impact, such as public appeals for conservation and voltage reductions.⁷ And any resource-demand shortage would last on only hours, not weeks or of course months.⁸

The DOE proposal is much ado about nothing.

The Worm Will Turn

Here's the third smoking gun. If FERC goes

forward with subsidizing certain resources for an insignificant quantity like fuel supply on site, it should recognize really important quantities like environmental/public health damage.⁹ In the case of coal, the National Research Council of the National Academies estimates that coal generation causes pollution damage averaging \$32/MWh.¹⁰

This means coal resources should pay \$32/MWh for their generation, to be subtracted from whatever revenues they otherwise would receive. The payments should be distributed to those hurt by coal generation.

This administration won't do that, but no administration is forever. Once the precedent is set for FERC to put its thumbs on the scales, coal better hope that the worm never turns.

Steve Huntoon is a former president of the Energy Bar Association, with 30 years of experience advising and representing energy companies and institutions. He received a B.A. in economics and a J.D. from the University of Virginia. He is the principal in Energy Counsel, LLP, www.energy-counsel.com.

¹ <http://ps://www.rtoinsider.com/erc-baseload-power-energy-department-doe-76332/>

² <http://ps://www.rtoinsider.com/murray-energy-department-doe-energy-76903/>

³ Murray said he had pressed Trump and Energy Secretary Rick Perry to have the secretary order financial support for a risk coal plant using DOE emergency authority, but the department and White House lawyers ruled against him. "They didn't want to declare the emergency," he said. "It was a low point because we worked hard at it and knew it was needed."

"They're doing it in a different way," Murray said. "Now we have another approach that is in use on the same point." <http://ps://www.eenews.net/energywire/2017/10/11/stories/1060063287>

⁴ <http://ps://www.rfrs.org/reliability/Documents/2016-17%20RF%20Assessment-Winter%20Resource.pdf>

⁵ ReliabilityFirst says, "To help side on the range of random outages are probability percentages related to the amount of random outages that equal or exceed the amount of outages shown above the line on the outage bar."

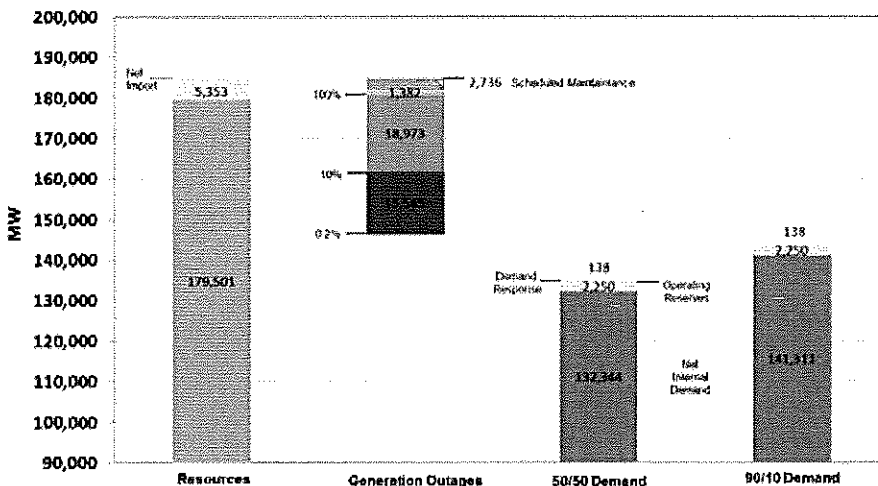
⁶ "Between 2012 and 2016, there were roughly 3.4 billion customer-hours impacted by major electricity disruptions. Of that, 2,382 hours, or 0.00007% of the total, was due to fuel supply problems." <http://ps://rthg.com/news/he-real-electricity-reliability-crisis>

⁷ Described in excruciating detail in PJM's Manual 13, <http://ps://pjm.com/-/media/documents/manuals/m13.ashx>

⁸ In the polar vortex, the generation emergencies in PJM aggregated 20 hours. http://ps://pjm.com/-/media/committees-groups/committees/elc/pos/pos_insp/performance-assessment-hours-2011-2014.xls.ashx?la=en

⁹ An elaborate and persuasive discussion of this proposal is provided by Professors Meredith Fowle and Maximilian Auffhammer: <http://ps://theconversation.com/why-rick-perry-proposed-subsidies-for-coal-all-economics-101-83339>

¹⁰ <http://ps://www.nap.edu/catalog/12794/hidden-costs-of-energy-unpriced-consequences-of-energy-production-and-consumption> (page 92, converting from kilowatt-hours to megawatt-hours). Damage from natural gas pollution is \$1.60/MWh (page 118). Damage from nuclear pollution is small (page 150). These figures do not include greenhouse gases.



Winter 2016/17 PJM outage risk | PJM

UNITED STATES OF AMERICA

BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

Notice of Proposed Rulemaking)

Docket RM18-1-000

Grid Resiliency Pricing Rule)

COMMENTS OF THE BIPARTISAN FORMER FERC COMMISSIONERS

WHO WE ARE AND WHY WE CARE

The Commission's mission is to "assist consumers in obtaining reliable, efficient and sustainable energy services at a reasonable cost through appropriate regulatory and market means."¹ Over the last twenty-five years the Commission has advanced that mission by enabling competitive wholesale markets to promote lower costs and greater efficiencies in the electric utility sector, just as it did in the natural gas sector. Our² common

¹ FERC Website: <https://www.ferc.gov/about/strat-docs/strat-plan.asp>

² Elizabeth Anne (Betsy) Moler, Commissioner 1988-1997, Chair 1993-1997; James J. Hoecker, Commissioner 1993-2001, Chairman 1997-2001; Donald F. Santa, Jr., Commissioner, 1993-1997; Linda Key Breathitt, Commissioner 1997-2002; Pat Wood, III, Chairman 2001-2005; Nora Mead Brownell, Commissioner 2001-2006; Joseph T. Kelliher; Commissioner 2003-2009, Chairman 2005-2009; Jon Wellinghoff, Commissioner 2006-2013, Chairman 2009-2013 ("the Bipartisan Former FERC Commissioners"). We were appointed to the Commission by every President since Ronald Reagan.

goal has been to encourage competition in the electricity sector in order to benefit customers, enhance reliability and facilitate construction of the infrastructure necessary to allow our great nation to grow and prosper.

Over this quarter century, we have each been intimately involved in leading this effort to achieve efficient, reliable energy service through market forces. We believed – with conviction borne of experience -- that requiring nondiscriminatory access to the nation’s electric transmission grids, and fostering open, wholesale competitive markets for the sale of electricity over those grids is the most cost-effective way to deliver energy services to customers, and is therefore in the public interest. Order No. 888, establishing transmission open access, and Order No. 2000, defining the responsibilities of regional transmission organizations (RTOs) are the key mileposts of this era. In addition, we issued hundreds of orders and adopted numerous other rules providing detailed guidance to these markets as they developed. We substantially expanded our market oversight and enforcement capabilities to protect customers from market fraud and abuse. And with those expanded capabilities we engaged in numerous significant enforcement actions to maintain order in these markets and protect customers’ interests. We also worked

tirelessly with market participants and state regulators to achieve balance in our decisions. This shared collaborative mission across party lines and Presidential Administrations has been a model of good government.

This effort to develop organized markets has been successful by almost any measure, reaching over two-thirds of all customers in the nation's economy. Widely diverse interests have invested tens of billions of dollars in both competitive and regulated infrastructure. Customers and the industry have benefitted from lower costs and better, more reliable services. Technological innovation has swept the entire value chain. The Commission's initiative has been supported by virtually all of the participants in this vitally important sector of our economy. It has drawn support from officials in every Presidential Administration over the last three decades, from every relevant committee of the Congress, and from courts at all levels of the Judiciary, including landmark opinions by the United States Supreme Court upholding the Commission's key orders.

OUR VIEW OF THE PROPOSAL

The published proposal in this Docket would be a significant step backward from the Commission's long and bipartisan

evolution to transparent, open, competitive wholesale markets. Pursuing the worthy goal of a resilient power system, the Commission's adoption of the published proposal would instead disrupt decades of substantial investment made in the modern electric power system, raise costs for customers, and do so in a manner directly counter to the Commission's long experience.

In the competitive wholesale markets, many states have elected to separate historic utility-owned power generating facilities from regulated operations, much as the Commission did with natural gas production operations and natural gas pipeline companies in the preceding decade. In the power sector, these separation proceedings were often contentious, and eventually gave rise to many billions of dollars of utility cost recovery for the excess book cost of generating plant over the then-market cost ("stranded costs"). Varying transition periods were set to recover those costs and make the utilities whole for their historic plant investments. It is a subset of these power plants that are the focus of this inquiry.

One critical aspect of competitive wholesale markets is that the risk of these generation investments has been shifted away from captive customers to market participants who could better manage risk (and some who have not been successful doing so).

Another achievement is that competitive wholesale markets have delivered lower-cost electric power and improved the efficiency of the generation fleet. And not just of the original power plants. This revolution stimulated tens of billions of dollars of investment in newer and cleaner power technologies, more efficient plant operations, competitive fuel procurement, efficient dispatch over large regions, more restrained prices, and more competitive (lower) margins. Power prices have tracked fuel prices, particularly that of natural gas, which is, in most hours and in most markets, the marginal unit fuel. New entrants to the competitive wholesale marketplace have included combined-cycle natural gas plants, renewable energy technologies, storage, distributed generation and demand response. It was entirely foreseeable that competition and technological innovation would result in the exit of high-cost generators. Wholesale competition, indeed, has forced existing resources to become more reliable or to exit the market, and many noncompetitive generating units have exited.³

³ This is not just a feature of competitive wholesale markets. Over half of the retirements of coal, gas and nuclear plants since 2002 have been from regulated status. A map depicting these retirements is shown on the Department of Energy's web page introducing the 2017 Staff Report to the Secretary on Electricity Markets and Reliability at <https://energy.gov/downloads/download-staff-report-secretary-electricity-markets-and-reliability>. It is also found in the Staff Report at page 15.

The independent RTOs that have developed under Order No. 2000 have done a superb job operating the transmission networks and managing markets reliably, safely and efficiently for all wholesale power customers. These new independently-run wholesale markets have also enabled retail customer choice programs across the country, most notably in the states that are most impacted by this inquiry.

The RTOs operate open, transparent markets. The least-cost resources for energy for every hour (accounting for reliability needs and transmission constraints) are purchased. In those RTOs with capacity markets, the least-cost resources for capacity (accounting for transmission constraints) are purchased. Those resources which fail to recover sufficient revenues from these markets, or otherwise from their customers, retire.

Subsidizing resources so they do not retire would fundamentally distort markets. The subsidized resources would inevitably drive out the unsubsidized resources, and the subsidies would inevitably raise prices to customers. Investor confidence would evaporate and markets would tend to collapse. This loss of faith in markets would thereby undermine reliability.

The Commission has always been fuel-agnostic, refraining from favoring one fuel over another. This is, in part, out of

recognition that the last federal effort to do that was quickly shown to be a grossly uneconomic mistake.⁴ We acknowledge that the markets today are not pristine; various kinds of external supports for resources still exist. Federal tax subsidies for wind and solar generation have been approved by Congress, as were less overt benefits for oil, gas and coal extraction. The states of New York and Illinois have also recently moved into this arena with the adoption of subsidies for certain nuclear plants. The Commission cannot ignore these interventions, and in fact, should actively inform legislators how such programs impact market operations. But one step the Commission has never taken is to create or authorize on its own the kind of subsidy proposed here.

We know there is always more to do to make wholesale markets more open, more transparent and more efficient; but moving backward is not the way to go. We strongly encourage the Commission to use this opportunity created by the Secretary to identify attributes of the current competitive market system that need to be improved, to crisply define them and either modify the current published proposal or initiate regional proceedings to examine resilience issues and consider the need for market rule changes.

⁴ The Powerplant and Industrial Fuel Use Act of 1978, repealed in 1987.

Several examples follow. All organized markets procure Black Start resources for restoring a power station or a part of the grid without reliance on external power. These procurement methods range from cost-of-service based tariffs in some of the RTOs to a fully competitive process used in ERCOT outside of FERC's jurisdiction. An outcome-based resiliency service could follow a similar pattern, to the extent current ancillary services are not providing it adequately.

Similarly, Reliability Must-Run (RMR) arrangements have been adopted by the RTOs to ensure that a specific resource, which would otherwise be mothballed or retired, remains available for a specified length of time to provide a base level of energy production needed for local reliability. A cost-based formula is often used to calculate the compensation for the affected unit, and the cost is uplifted to the broader RTO market. The RTOs and the Commission are well aware of the negative impact such out-of-market interventions can have on the marketplace. For that reason, RMR contracts have been used relatively sparingly and to address well-defined, limited local reliability challenges that the market could not address in the short term.

The issues of reliability and resiliency are not new to the Commission. These issues are more likely to be related to utility transmission and distribution systems;⁵ after an emergency, it is the power delivery system recovery timeline that drives the restoration of retail service. To be sure, a more robust transmission and distribution system will add resilience in all markets. While there have been some instances of generation-related customer outages,⁶ fuel supply emergencies have been an insignificant cause of customer outages. To the extent these could become an issue, there are market-based solutions that can be employed; for example, the recently-implemented capacity performance programs in PJM and ISO-NE are intended to incent and reward fuel supply certainty, and to severely penalize the failure to provide power at critical times.

⁵ A memorable example of a power delivery failure, the 2003 Northeastern North American Blackout, originated in Ohio when inadequate vegetation management by a transmission-owning utility triggered multiple transmission outages on a summer afternoon and the tripping of a coal-fired power plant in Cleveland. These incidents, combined with inadequate situational awareness across the region, led to cascading failures across northeastern North America, and over fifty million people were out of power, some for up to seven days. The FERC Staff summary of this incident is found at:

<https://www.ferc.gov/CalendarFiles/20040915141105-blackout.pdf>

⁶ See, e.g., <https://www.ferc.gov/legal/staff-reports/08-16-11-report.pdf> regarding a February 2011 cold weather event in Texas and the Southwest. And the causes of the 2000-2001 power outages in California are well known to the Commission (and to these commenters).

In our years of service on the Commission, we all leaned heavily on the use of broad stakeholder processes in the organized markets to develop balanced rules for all to live under, and we remain supportive of the checks and balances such mechanisms provide. To the extent, however, these processes are unable to address the reliability and/or resilience issues raised in this Docket, the independent Boards of the organized markets should be able to file directly for Commission approval of such changes. That is a principal reason why we insisted in Order No. 2000 on such independent governance.

CONCLUSION

In the end, it is the Commission that has statutory responsibility for just and reasonable rates and for maintaining reliability. This is an extremely challenging responsibility shared by five independent Commissioners and a dedicated staff. We therefore urge the Commission to actively defend and promote reliable, competitive energy markets in all arenas. The injection of uncertainty over the future of efficient, competitive electric markets and the highly capital-intensive and vitally important electric industry impairs critical long-term investment and jeopardizes the delivery of cost-effective energy services to

customers.

Accordingly, we urge you not to move forward with the published proposal, and instead address the issues of power system reliability and resiliency consistent with the Commission's long history and in the transparent, bipartisan, policy-centered manner for which this Commission has long been respected.

Respectfully submitted,

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October 19, 2017

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**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Grid Reliability and Resilience Pricing) Docket No. RM18-1-000

**INITIAL COMMENTS OF PJM INTERCONNECTION, L.L.C.
ON THE UNITED STATES DEPARTMENT OF ENERGY PROPOSED RULE**

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October 23, 2017

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Appendix A
PJM’s Answers to Staff Questions

Appendix B
Letter to Mr. Stu Bresler, Sr. Vice President Operations & Markets

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Grid Reliability and Resilience Pricing) Docket No. RM18-1-000

**INITIAL COMMENTS OF PJM INTERCONNECTION, L.L.C.
ON THE UNITED STATES DEPARTMENT OF ENERGY PROPOSED RULE**

PJM Interconnection, L.L.C. (“PJM”) hereby submits its initial comments on the Notice of Proposed Rulemaking submitted to the Commission by the Secretary of the United States. Department of Energy (“DOE”) on September 28, 2017, as revised upon publication in the Federal Register on October 10, 2017 (“DOE NOPR”).¹ To assist the Commission’s evaluation of the DOE NOPR, PJM also responds, in Appendix A to these comments, to the questions posed in the Commission’s October 4, 2017 request for information relevant to the DOE NOPR.

I. INTRODUCTION

As shown in these Comments, the DOE NOPR is well wide of the mark both in its statement of the problem it seeks to address and in its identification of a reasonable remedy. Accordingly, PJM believes that a prudent path for the Commission should include: (a) re-focusing from the DOE NOPR's broad-brush concern with changes in the resource mix to a deeper, more meaningful, and more productive consideration of how resource mix changes are affecting each individual Regional Transmission Organization

¹ The Secretary proposed the rule pursuant to section 403 of the Department of Energy Organization Act, 42 U.S.C. § 7173. *See* Grid Resiliency Pricing Rule, 82 Fed. Reg. 46,940 (proposed Oct. 10, 2017). The Commission noticed the proposed rule on October 2, 2017, seeking initial comments by October 23, 2017, and reply comments by November 7, 2017. *See* *Grid Reliability and Resilience Pricing*, Notice Inviting Comments, Docket No. RM18-1-000 (Oct. 2, 2017).

(“RTO”) markets, operations, and reliability and (b) directing the submission of regional solutions, as needed, subject to a filing deadline, that are more in line with the actual history and experience of each RTO given its particular resource mix, and operational and reliability needs. Through these comments, PJM will demonstrate:

- The lack of support, both legally and factually, for the DOE NOPR’s identification of the stated problem;
- The legal and factual infirmities associated with the DOE’s proposed cost of service remedy;
- How the problem identified by the DOE can be restated to more accurately reflect price formation issues that are in line with historic RTO experience; and
- An alternative path promising solutions that allow for regional flexibility while responding to the direction called for in the DOE Staff’s August 2017 Report² to examine correct price formation in organized electricity markets.

Accordingly, PJM urges the Commission to find that the DOE NOPR, although referencing certain legitimate findings made in the DOE Staff Report, does not correctly state the problem nor propose a reasonable solution that meets the just and reasonable standard under the Federal Power Act (“FPA”).³ As shown in these Comments, the DOE NOPR takes observations about overall changes in the resource mix across the nation as the basis for a sweeping and unsupported conclusion that, solely in regions with capacity and energy markets, certain units, regardless of their location, performance history, or competitiveness, deserve full cost recovery through out-of-market mechanisms.

² *Staff Report to the Secretary on Electricity Markets and Reliability*, U.S. Department of Energy (Aug. 17, 2017) (“DOE Staff Report”).

³ 16 U.S.C. § 824e.

Specifically, the DOE NOPR:

- Is inconsistent with very recent findings and recommendations published by the DOE on the subjects of fuel security, grid resilience and RTO market price formation;
- Does not meet basic standards of reasoned decision-making—the claimed facts do not lead to the proposed remedy;
- Contradicts the plain fact that reliability generally has been well-served in regions with capacity and energy markets;
- Would represent a radical departure from years of Commission approval of single-clearing price markets;
- Would undermine reliability and lead to substantially higher costs and economic inefficiencies;
- Contradicts Congressional endorsement of the Commission’s increased reliance on competitive markets;
- Intrudes on state resource choices, include choices to rely on RTO-administered competitive markets;
- Creates distortions in investment decisions that will exacerbate seams issues and actually harm rather than enhance system reliability;
- Attempts to impose blanket, guaranteed cost recovery for numerous resources in a manner flatly contradictory to long-standing, fundamental rate-making requirements under the FPA; and
- Violates the FPA’s prohibition on undue discrimination.

Given coal-fired and nuclear generators comprise just over fifty percent of all currently installed generation capacity in the PJM region,⁴ if the DOE NOPR were adopted, it would remove half of all the capacity in the PJM region from the discipline of competitive market forces. Even accepting the nature and degree of the DOE’s concerns,

⁴ See PJM Interconnection, L.L.C., <http://www.pjm.com/~media/markets-ops/ops-analysis/capacity-by-fuel-type-2016.ashx> (last visited Oct. 27, 2017) (showing nuclear and coal as a combined 53% of the resource mix).

its NOPR fails to consider the most obvious alternative. Assuming there is a shortcoming in capacity and energy markets, the *first* response should be to fix such a shortcoming, which is to say, evaluate structural market changes that better define and value resources' operational and reliability attributes *within the market rather than upending market principles in their entirety*.

As noted above, PJM believes a better identification of the underlying concern, as well as PJM's proposed procedural pathway, is far more appropriate given the legal and practical infirmities of the DOE NOPR as proposed. For its part, PJM has seen changes in the workings of its market traceable to resource mix changes and other industry changes over recent periods. Those observed changes raise clear concerns about market price formation under current rules, including treatment of fast-start resources, recognition of inflexible resources in clearing prices, shortage pricing, and resource characteristics and attributes that currently are not, but should be, identified and valued in the market. In these Comments, PJM describes those observed impacts, and clearly shows the concerns those impacts raise.

In section III herein, PJM explains why reforms are needed in PJM now to ensure that (i) the cost of serving load is reflected in LMP to the fullest extent possible, (ii) uplift is reduced, and (iii) proper economic incentives are maintained. Enhanced energy market price signals will strengthen performance incentives in PJM's markets and is in line with other reforms being considered by PJM. The Commission should act now to ensure that essential reliability services that resources provide are maintained. PJM understands not all regions face the same need for action. An extensive record has been developed to date in this area in the Commission's price formation proceedings, as confirmed by the August

DOE Report. Thus, to move forward, the Commission should direct each RTO/ISO to identify for the Commission whether changes in the resource mix has created issues in their respective regions that are currently not addressed in the market. If any issues exist, the RTO/ISO should prioritize the issues of most consequence to that region and provide, within a Commission-specified deadline that is in the near term, for the submission of proposals, if necessary.⁵ In the alternative, the Commission could expand the scope of its existing open price formation NOPRs to provide for regional solutions around the issues it has broadly identified in those dockets.

II. COMMENTS

A. **The DOE NOPR Incorrectly Identifies a Perceived Problem and Its Cause, and Seeks to Impose a Remedy That Is Not Supported by the Reliability and Resilience Concerns the DOE NOPR Claims to Address**

The DOE NOPR misidentifies a problem, misstates the cause, and then proposes a radical solution that is antithetical to clear Congressional and Commission policy in favor of promoting competitive energy markets. The DOE NOPR assumes without support that there is a resilience crisis that is urgently unfolding because coal and nuclear units are retiring, that market prices are to blame, and that the only solution is to incentivize those coal and nuclear units to remain in service by providing them with guaranteed cost of service rate recovery regardless of whether they are needed for resilience or actually provide measurable resilience benefits. The DOE NOPR does this to the detriment of competitive markets.

⁵ The Commission could require that, to the extent an ISO/RTO identifies no changes are necessary for its region, the ISO/RTO would be required to submit a report to the Commission within that time frame, in place of a tariff proposal.

Given its scope and applicability, the DOE NOPR is a transparent attack on those RTOs and ISOs that operate capacity markets generally⁶—and possibly PJM specifically⁷—without any showing that the misidentified problem exists in PJM or those other markets and exists exclusively in those markets. While claiming to address an imminent threat to the “resilience” of the electric grid from looming retirement of so-called “fuel-secure” baseload resources, the DOE NOPR fails to demonstrate that any such threat is imminent, that retirements are to blame, that competitive markets and specifically capacity markets are forcing retirements that would not have otherwise occurred, or that its proposed solution will actually address the perceived problem. The DOE NOPR’s compensation mandate is wholly unjustified and the Commission should reject it.

The DOE NOPR conflates resilience with reliability. The DOE NOPR does not explain how maintaining a 90-day supply of fuel will enable quick restoration of service following a catastrophic grid event, which is a cornerstone concept of resilience. Instead, the proposal seeks to keep coal and nuclear units online all the time as baseload resources, indicating the DOE NOPR’s concern is reliability, not resilience. The DOE NOPR proposes to maintain otherwise uneconomic coal and nuclear units by affording them cost of service rate recovery, enabling them to offer into the markets at unrealistically low prices, clear, and operate continuously as “baseload.” While secure fuel and a robust resource mix contribute to both reliability and resilience, the DOE

⁶ As the publication of the DOE NOPR in the Federal Register makes plain, *capacity markets* are the sole target of the DOE NOPR’s mandates. See DOE NOPR at 46,944.

⁷ Notably, PJM is the only RTO mentioned in the DOE NOPR.

NOPR fails to show that acquiring 90 days' worth of fuel, and rewarding those units that are able to do so, is necessary to ensure either reliability or resilience.

In fact, the DOE NOPR provides no definition of resilience at all, and further fails by neglecting to identify any performance standards or metrics to evaluate the resilience characteristics, effectiveness, and performance of various resource types. In place of such standards, the DOE NOPR establishes blanket eligibility for any resource that participates in competitive energy markets outside of retail cost of service rate regulation, satisfies an arbitrary 90-day fuel supply requirement, and satisfies other minimum characteristics, regardless of whether the resource is needed to provide reliability or resilience services to the grid.

In short, the DOE NOPR's identification of the perceived problem is not correct, and its proposed imposition of cost of service pricing will not only fail to fix the perceived problem but will have severe adverse effects on competitive markets that the Commission and RTOs like PJM have labored for decades to develop.

1. The Facts and Sources Cited by the DOE NOPR Do Not Support Its Findings or Proposal

Rather than attempting to offer concrete evidence of a looming resilience crisis caused by mass retirement of coal and nuclear units that can only be fixed by destroying competitive markets, the DOE NOPR relies on hollow assertions that the resilience of the nation's electric grid is imminently threatened by premature retirement of so-called fuel-secure baseload resources⁸ and self-evident observations like winter is coming.⁹ The DOE NOPR provides no justification for imposing onto competitive energy markets a

⁸ DOE NOPR at 46,941.

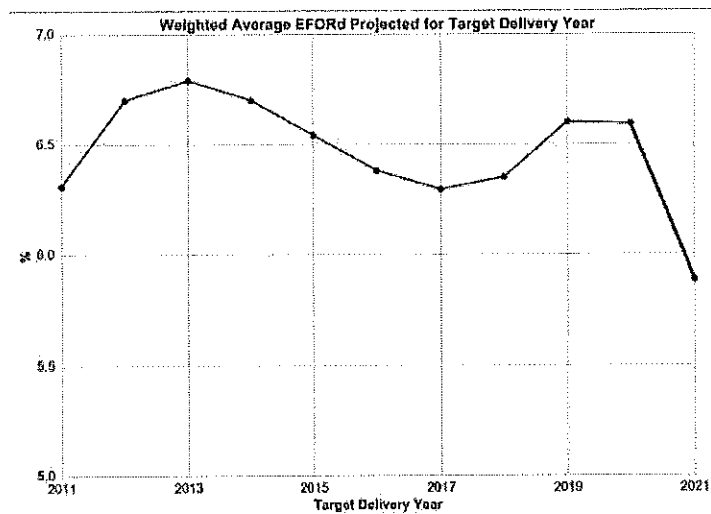
⁹ DOE NOPR at 46,945 (urging the Commission to "take action before the winter heating season begins").

large new out-of-market cost burden for certain select generation resources, and certainly no compelling explanation of why such action is urgently needed to stave off an imminent crisis.

The thin reed upon which the DOE NOPR's call for urgency and its proposed remedy is built is the notion that generation resource retirements are occurring and unusual weather events have presented challenges to grid operators in the past few years. Specifically, the DOE NOPR cites select discussion from the January 2017 Quadrennial Energy Review¹⁰ and the recent DOE Staff Report regarding recent and anticipated future retirements of coal and nuclear units and weather anomalies such as the 2014 Polar Vortex.¹¹ None of these sources, however, support the DOE NOPR's radical replacement of competitive markets with federal cost of service ratemaking for certain favored generators. And in fact, PJM's system remained reliable despite nearly 14,000 MW of coal retirements in the recent past due in part to changing environmental rules. The unusually high unforced outage rate during the Polar Vortex has been mitigated—as can be seen in Figure 1—through various measures, including PJM's Capacity Performance reforms and steps it has taken for winter preparedness, discussed herein and in PJM's responses to OEPI's questions in Appendix A hereto.

¹⁰ Quadrennial Energy Review, *Transforming the Nation's Electricity System: the Second Installment of the Quadrennial Energy Review*, Department of Energy (Jan. 2017), [https://energy.gov/sites/prod/files/2017/02/f34/Quadrennial%20Energy%20Review--Second%20Installment%20\(Full%20Report\).pdf](https://energy.gov/sites/prod/files/2017/02/f34/Quadrennial%20Energy%20Review--Second%20Installment%20(Full%20Report).pdf).

¹¹ DOE NOPR at 46,942.

Figure 1: Weighted-Average EFORD Projected for DY

The drop in Weighted Average EFORD projected for 2021 is due to:

- Large amount of deactivations with high EFORD (7,150 MW with 14.56% Weighted Average EFORD)
- Large amount of additions with low EFORD (16,980 MW with 4.42% Weighted Average EFORD). Additions include only those queue projects that had executed an ISA by April 17, 2017.

The DOE NOPR appears to blame competitive market pricing and rules as the sole or primary impetus for retirement of coal and nuclear units. However, the DOE NOPR paints an incomplete picture of the findings and conclusions on which it relies. Notably, the DOE Staff Report identifies many factors contributing to retirements, including, among other things, the age of the plants in question,¹² state public policy

¹² E.g., DOE Staff Report at 22 (“The age of coal plants is an important factor . . . [T]he vast majority of coal-fired capacity was built before 1990, with the average of the fleet built in the mid to late 1970s.”) (emphasis added); *id.* (“According to the Congressional Research Service, the service life of coal-fired generators reportedly ‘averages between 35 and 50 years . . .’” (quoting Richard J. Campbell, *Increasing the Efficiency of Existing Coal-Fired Power Plants*, Congressional Research Service, 6 (Dec. 20, 2013), <https://fas.org/sgp/crs/misc/R43343.pdf>)); DOE Staff Report at 21 (“Most coal-fired capacity (88%) was built between 1950 and 1990, and the capacity-weighted average age of operating coal facilities is 39 years.” (citing Scott Jell, *Most Coal Plants in the United States Were Built Before 1990*, Energy

decisions,¹³ federal environmental requirements,¹⁴ and more cost-effective alternative fuels.¹⁵ While the DOE NOPR also suggests that the retirements it identifies are “premature,”¹⁶ it provides no analysis of whether such retirements truly have occurred prior to the end of the useful lifecycle of the resources in question, further eroding evidentiary support for the DOE NOPR’s costly compensation mandate. While RTOs are examining whether market price formation rules could be revised to recognize the reliability and resilience values brought by a diversity of resource types,¹⁷ the DOE Staff Report provides no evidentiary basis to conclude that market prices are the sole or even primary cause of coal and nuclear retirements. Subsidizing such favored units will not

Information Administration (Apr. 17, 2017), <https://www.eia.gov/todayinenergy/detail.php?id=30812>); DOE Staff Report at 23 (“Retired plants are older than the remaining fleet. The coal units that retired in 2015 were mainly built between 1950 and 1970, and the average age of those retired units was 54 years.”).

¹³ *E.g.*, DOE Staff Report at 16 (“Some of the nuclear units now closing are doing so because of state pressure (as with California’s Diablo Canyon, New Jersey’s Oyster Creek, and New York’s Indian Point)”)

¹⁴ *E.g.*, DOE Staff Report at 17 (“Figure 3.3 shows that a significant amount of capacity (the highest on record) retired in 2015, *coinciding with the [Mercury and Air Toxics Standards (“MATS”)] compliance deadline*, which applied to coal- and oil-fired units across the country, as well as the finalization of the *Clean Power Plan rule*.”) (emphasis added); *id.* at 19 (“The compliance deadline for MATS converged with tightening pollution limits in sulfur dioxide (SO₂) and nitrogen oxide (NO_x) trading programs. *Many of the coal and oil retirements in this period were plants whose owners chose to shut down a plant rather than invest in costly environmental remediation measures.*”) (emphasis added); *id.* at 24 (“Most of the power plants being closed today were built in the 1940s to 1960s, *before the Clean Air Act was passed in 1970*. Many have minimal air pollution controls Many closures coincided with the MATS deadlines in 2015 and 2016” (emphasis added) (quoting Ed Malley, *Coal Power Plant Post-Retirement Options*, POWER (Sept. 1, 2016), <http://www.powermag.com/coal-power-plant-post-retirement-options/>)).

¹⁵ *E.g.*, DOE Staff Report at 24 (“The increase in natural gas generation since 2005 is primarily a result of the continued cost-competitiveness of natural gas relative to coal.” (quoting Augustine Kwon, *Natural Gas Generation Make Up the Largest Share of Overall U.S. Generation Capacity*, Energy Information Administration (Apr. 20, 2017), <https://www.eia.gov/todayinenergy/detail.php?id=30872>)).

¹⁶ *See, e.g.*, DOE NOPR at 46,941 (“The resiliency of the nation’s electric grid is threatened by the *premature retirements* of power plants”) (emphasis added).

¹⁷ *See infra* Section A(3).

ward off other externalities that the DOE's own staff has identified as contributing to plant retirements.

Similarly, the 2017 QER Report provides no basis to conclude that there is an imminent resilience emergency that can best be solved by distorting competitive markets through imposition of cost of service rate recovery for coal and nuclear resources. Quite the contrary, in its recommendations on "Grid Operations and Planning for Electricity System Reliability, Security and Resilience," the 2017 QER Report recommends such initiatives as (among others): (1) providing incentives for energy storage; (2) improving data for grid security and resilience; (3) requiring states to consider the value of distributed energy resources; (4) enhancing coordination among the industry; (5) encouraging cost effective use of advanced technologies that improve transmission operations; and (6) improving data, monitoring, and analysis capabilities.¹⁸ Absent from the 2017 QER Report's list of resilience recommendations is anything resembling the DOE NOPR's proposal to subsidize aging and inefficient generation units to the detriment of competitive markets.

Likewise mischaracterized and misconstrued are the recent extreme weather events upon which the DOE NOPR relies. Contrary to the DOE NOPR, neither the 2014 Polar Vortex nor the recent hurricanes justify upending existing competitive energy markets. Indeed, as the DOE Staff Report acknowledges, during the Polar Vortex, "[m]any coal plants could not operate due to conveyor belts and coal piles freezing."¹⁹

¹⁸ 2017 QER Report at S-25–S-26.

¹⁹ DOE Staff Report at 98. The DOE Staff Report also concluded that "[w]hile coal facilities typically store enough fuel onsite to last for 30 days or more, extreme cold can lead to frozen fuel stockpiles and disruption in train deliveries." *Id.* at 11-12.

While fuel delivery was an issue during the Polar Vortex, it was not the driving factor behind outages that occurred during the extreme weather event, nor was gas-fired generation the villain, nor coal and nuclear the savior, that the DOE NOPR suggests them to be. Specifically, during the Polar Vortex, of the approximately 40,200 MW of forced generator outages in PJM, coal steam outages (considering all sources of failure) were the largest outage category, at 13,700 MW (representing 34% of the outages), and nuclear outages totaled 1,400 MW.²⁰ Having a 90-day fuel supply would not have cured these outages, for it was not a lack of fuel that caused them. Additionally, as PJM has explained, all resource types, except for wind and demand response, performed sub optimally during the extreme weather event:

At the time of the peak demand hour on January 7, approximately 22 percent of total installed generation capacity in PJM (of all fuel types) was unavailable because of forced outages associated with routine equipment breakdowns, *problems related to operating in extreme cold temperatures* and, fuel-supply issues. Although there has been much focus on gas issues associated with interruptible transportation, *overall the gas interruptions were not the major driver of the high forced outage rates* experienced in the PJM region. *Natural gas interruptions, although significant, removed less than five percent of the total capacity* required to meet demand on January 7, *while equipment issues associated with both coal and natural gas units made up the far greater proportion of forced outages.*²¹

Notwithstanding these significant challenges, as the DOE Staff Report explains, PJM and other “grid operators generally met demand, even under these severe conditions.”²² Fuel

²⁰ *Analysis of Operational Events and Market Impacts During the January 2014 Cold Weather Events*, PJM Interconnection, L.L.C., 26 (May 8, 2014), <http://www.pjm.com/~media/library/reports-notice/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-cold-weather-events.ashx>.

²¹ Post-Technical Conference Comments of PJM Interconnection, L.L.C., Docket No. AD14-8-000, at Appendix 1 (Statement of Michael J. Kormos Executive Vice President – Operations, PJM Interconnection, L.L.C. at 3-4) (May 15, 2014) (“Kormos Statement”) (*emphasis added*).

²² DOE Staff Report at 98.

supply was not the sole or even primary issue affecting grid operations during the Polar Vortex, and compensating *all* qualified “fuel-secure” generators for maintaining a 90-day fuel supply would not have made a significant difference in addressing the impacts of the Polar Vortex.

Likewise, the DOE NOPR’s reliance on Superstorm Sandy and recent hurricanes also fails to justify its radical cost of service subsidy scheme. As an initial matter, in high wind events like hurricanes, it is often the distribution and, to a lesser degree, transmission system that are most impacted. For example, as NERC notes in its assessment of Superstorm Sandy, 16,738 MW of fossil fuel generation became unavailable during the storm, which “did not result in any capacity issues,” “[b]ecause of the amount of load preemptively *off or unavailable to the distribution system.*”²³ NERC also noted that “[w]hile there was sufficient generation capacity available to meet the load as restoration progressed, there were some cases where customer restoration was hindered by *local area transmission outages.*”²⁴ In other words, even though generating power was available to serve customers, power line damage prevented it from being delivered to many customers experiencing service outages. Having 90 days’ worth of fuel onsite does nothing to counteract the impact of distribution or transmission infrastructure damage that is often the cause of customer service outages during a hurricane or similar event.

²³ *Hurricane Sandy Event Analysis Report*, NERC, 22 (Jan. 2014), http://www.nerc.com/pa/rrm/ea/Oct2012HurricaneSandyEvtAnlyssRprtDL/Hurricane_Sandy_EAR_20140312_Final.pdf (“NERC Hurricane Sandy Report”) (emphasis added).

²⁴ *Hurricane Sandy Event Analysis Report*, NERC, 22 (Jan. 2014) at 5 (emphasis added).

The evidence and events that the DOE NOPR cites do not support its assertion of a resilience crisis or its rationale for degrading competitive markets in the name of fuel resilience. As experience during extreme weather events has shown, myriad factors contribute to outages, and fuel security, while beneficial, provides no guarantee of resilience during such events. Given the paucity of evidence to support its expensive and anticompetitive cost of service guarantee, the DOE NOPR appears aimed less at truly addressing resilience concerns and more at benefitting certain preferred generators and fuels and the industries they support.

2. The PJM Region Is Reliable, and PJM's Competitive Markets Have Been Instrumental in Helping Ensure that Reliability.

As explained above, the DOE NOPR offers nothing to show that market regions in general, or the PJM Region in particular, is in any danger of failing to meet reliability or resource adequacy requirements now or in the future. This is not surprising, as the PJM Region unquestionably is reliable, and its competitive markets have for years secured commitments from capacity resources that well exceed the target reserve margin established to meet NERC requirements. And the PJM capacity market also includes rigorous performance requirements, enforced by market mechanisms—which were affirmed just this year by a U.S. Court of Appeals.²⁵

First, contrary to suggestions that the DOE NOPR changes are needed to “keep[] the lights on,”²⁶ PJM’s capacity market has consistently secured Capacity Resources above and beyond the level needed to meet the NERC standard of no more than one

²⁵ *Advanced Energy Mgmt. All. v. FERC*, 860 F.3d 656 (D.C. Cir. 2017).

²⁶ *Department of Energy Missions and Management Priorities Before the H. Comm. On Energy and Commerce Subcomm. On Energy*, 115th Cong. 3 (2017) (testimony of Secretary Rick Perry, U.S. Department of Energy).

expected loss-of-load event every ten years. For the next three Delivery Years (extending through May 31, 2021), the Base Residual Auctions resulted in reserve margins of 19.8% (2018/2019 DY), 22.4% (2019/2020 DY), and 23.3 % (2020/2021 DY).²⁷ These reserve margins are about four to six percentage points above the level needed to meet the NERC loss-of-load-expectation criteria.²⁸ These auctions also have elicited significant investments in new generation, at competitive costs generally below administrative estimates of the cost of new entry.²⁹ Notably, the capacity committed to the PJM Region through 2021 (and entitled to receive capacity revenues for at least that long) include coal and nuclear plants (of all ages) in megawatt amounts that rival or exceed the capacity base for those two plant types seen in any other region in the continental U.S.³⁰

Second, even looking past aggregate resource commitments to consider reliability of the resource mix, PJM's initial rigorous analysis of that issue earlier this year³¹ yielded encouraging results, and found no immediate (or even near-term) emergencies.³² PJM assessed future likely and plausible generation resource mix portfolios on their ability to provide certain essential reliability services, including frequency response, voltage control, ramp, fuel assurance, flexibility, black start, environmental restrictions, and

²⁷ *2020/2021 PJM Base Residual Auction Results*, PJM Interconnection, L.L.C., 6 tbl. 1 (May 23, 2017), <http://www.pjm.com/~media/markets-ops/rpm/rpm-auction-info/2020-2021-base-residual-auction-report.ashx?la=en>.

²⁸ *Id.*

²⁹ *Id.*

³⁰ See Figure 3 below, and the cited EIA source data (which shows PJM had installed coal and nuclear plant capacity at year-end 2015 in excess of 100,000 MWs).

³¹ See PJM's *Evolving Resource Mix and System Reliability* (March 30, 2017), available at <http://www.pjm.com/~media/library/reports-notice/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx> ("Evolving Resource Mix and Reliability Report").

³² *Id.* at 4-5.

equivalent availability factor.³³ PJM also tested those possible future portfolios using both a standard loss-of-load analysis, and an adjusted analysis that accounted for the potential added load-loss risk of heavy reliance on intermittent resources. PJM found that “the expected near-term resource portfolio is among the highest-performing portfolios and is well-equipped to provide the generator reliability attributes.”³⁴ That expected near-term portfolio is for 2021, taking account of trends in generator deactivation and added capacity from the PJM Generator Interconnection Queues.³⁵ More work and analysis needs to be done in this area, as discussed later in these comments, but the analysis to date strongly indicates that market mechanisms *can effectively meet* the challenges posed by a changing resource mix.

Third, the DOE NOPR ignores the PJM competitive markets’ demonstrated strength as a platform for innovation and adaptation. Competitive markets are very good at quickly recognizing and rewarding efficiency gains. That inherent strength is itself an important advantage to maintaining a resource base that leverages technological change to help ensure long-term reliability. Competitive markets, therefore, have seen markedly higher development and implementation (compared to non-market areas) of highly efficient, latest generation combined cycle plants, new storage technologies, and demand response.³⁶ At the same time, competitive markets have not been conducive to high-risk, high-capital-cost, experimental technologies—which, more often than not, have produced

³³ *Id.* at 3.

³⁴ *Id.* at 4 (footnote omitted).

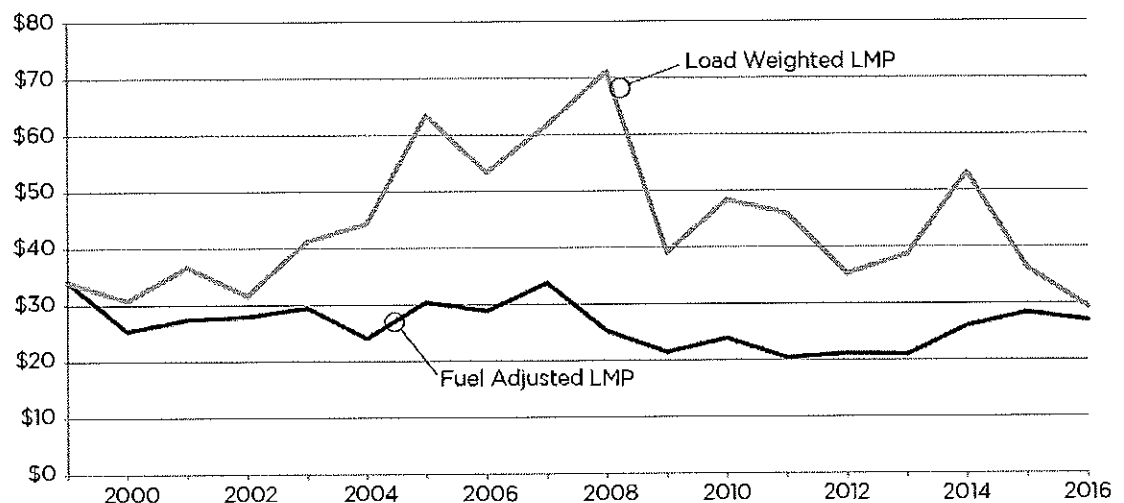
³⁵ *Id.* at 4 n.9.

³⁶ *Resource Investment in Competitive Markets*, PJM Interconnection, L.L.C., (May 5, 2016), <http://www.pjm.com/~media/library/reports-notice/special-reports/20160505-resource-investment-in-competitive-markets-paper.ashx> (“PJM 2016 Resource Investment Whitepaper”).

far more cost than benefit for ratepayers in the regulated areas where such projects have been pursued.³⁷

Indeed, the market is able to handle changes in technologies and shifts in resource mix in a manner that resulted in lower energy market Locational Marginal Prices (“LMPs”) (Figure 2). As can be seen, load-weighted LMPs peaked in 2008. Since that time, the factors discussed above (particularly the reduction in price, and increase in availability, of natural gas) have resulted in a drop of over 50% in load-weighted LMPs. By contrast, the fuel-adjusted LMP (which seeks to factor out differences in fuel cost), has changed relatively little—revealing that the observed drop in load-weighted LMP has indeed been largely driven by fuel cost changes.

Figure 2. Annual Fuel-Adjusted and Load-Weighted LMP (1999-2016)



Furthermore, for roughly two decades the PJM energy market, based on the LMP construct, has provided reliable price signals that, among other things, have helped to drive efficient resource entry and exit.³⁸

³⁷ *Id.*

3. *The DOE NOPR Ignores Efforts Underway to Address Resilience through Markets*

PJM is examining resilience, as distinguishable from reliability, and the DOE NOPR overlooks many of what PJM would consider to be the more salient resilience issues, which relate to the transmission grid and not to supply resources. Moreover, the DOE NOPR suggests a remedy, namely cost of service compensation for resources that satisfy an on-site fuel storage criterion, which would yield few if any system reliability or resilience benefits.

On March 30, 2017, PJM issued a report that examined the reliability implications of PJM's changing resource mix, as driven by environmental regulations, the availability of low-cost natural gas, the increasing penetration of renewable resources and demand response, and the potential retirements of nuclear power plants.³⁹ Among other things, the Evolving Resource Mix and Reliability Report found: (1) as the potential resource mix moves in the direction of less coal and nuclear generation, generator attributes of frequency response, reactive capability, and fuel assurance decrease, but flexibility and ramping attributes increase; and (2) operational reliability can be maintained even if natural gas-fired resources replaced all coal-fired and nuclear generation resources.⁴⁰

Notably, the Evolving Resource Mix and Reliability Report primarily examined *reliability* in the context of the bulk electric system, not *resilience*. Resilience, as PJM and other entities define it, which is the putative focus of the DOE NOPR, relates to preparing for, operating through, and recovering from a high-impact, low-frequency

³⁸ PJM began operating as an independent system operator, using the LMP construct, on January 1, 1998. See *Pennsylvania-New Jersey-Maryland Interconnection, et al.*, 81 FERC ¶ 61,257 (1997); *order on reh'g*, 92 FERC ¶ 61,282 (2000).

³⁹ See Evolving Resource Mix and Reliability Report at 1; see also DOE Staff Report at 99.

⁴⁰ Evolving Resource Mix and Reliability Report at 5.

event. Resilience means remaining reliable even during those events. PJM believes a heavy reliance on one resource type, such as a theoretical resource portfolio composed of 86 percent natural gas-fired resources, *could* raise questions about system resilience.⁴¹ Relying too heavily on a single fuel type could negatively impact resilience because of the potential for reduced diversity of resource attributes.⁴² In general, a more diverse resource portfolio is a more resilient portfolio. PJM's resource portfolio is more diverse today than ever before, and the PJM region is less dependent on any single fuel type than other regions of the country.⁴³

PJM and its stakeholders regularly examine resilience-related low-probability and high-impact events that could cause reliability impacts to the PJM system. For example, PJM recently held a stakeholder event on security and resilience,⁴⁴ including cyber and physical security, and previously held a stakeholder event on fuel diversity and resilience.⁴⁵ Also, PJM has focused particular attention on techniques to identify and mitigate natural gas infrastructure vulnerabilities. On October 10, 2017 the PJM Operating Committee reviewed information on resilience planning related to gas-electric coordination.⁴⁶ To advance resilience, PJM intends to create operating procedures that

⁴¹ *Id.* at 5.

⁴² *Id.* at 5-6.

⁴³ See Figure 3, above.

⁴⁴ See *Grid 20/20: Focus on Security & Resilience*, PJM Interconnection, L.L.C., <http://www.pjm.com/committees-and-groups/stakeholder-meetings/symposiums-forums/grid-2020-focus-on-security-and-resilience.aspx> (last visited Oct. 23, 2017).

⁴⁵ See *Grid 20/20: Focus on Resilience (Fuel Mix Diversity & Security)*, PJM Interconnection, L.L.C., <http://www.pjm.com/committees-and-groups/stakeholder-meetings/symposiums-forums/grid-2020-focus-on-resilience-part-1-fuel-mix-diversity-and-security.aspx> (last visited Oct. 23, 2017).

⁴⁶ See *Operationalizing Gas Pipeline Contingencies Normal and Conservative Operations*, PJM Interconnection, L.L.C., (Oct. 10, 2017), <http://www.pjm.com/-/media/committees-groups/committees/oc/20171010/20171010-item-16-gas-electric-contingencies-update.ashx>.

will define specific processes to be followed to evaluate the risk on the electric system of natural gas infrastructure vulnerabilities, with a clear understanding of natural gas infrastructure redundancy including generator dual-fuel capabilities such as on-site liquid fuel. Those procedures also will operationalize natural gas pipeline contingencies under normal operations and external threat conditions, such as cyber and physical threats. Given the early stages of this collaboration, the next steps for PJM and its stakeholders include defining metrics for resilience and criteria for evaluating potential mitigating actions not limited to generation as was the focus of the DOE NOPR, but, rather also to include market changes, operational changes such as reserves, transmission upgrades and evolving distributed energy resource technologies and resources. PJM is also highly engaged with stakeholders in incorporating resilience as a driver or a factor in the transmission planning process with the objective of minimizing or eliminating in some cases the criticality of facilities.

4. *The DOE NOPR Provides No Basis for Singling Out RTO Markets, Much Less RTOs with Capacity Markets*

The DOE NOPR bemoans the spate of “premature” retirements of coal and nuclear generation resources as causing a resilience crisis that demands federal government intervention in the form of cost of service subsidies. According to the DOE NOPR, this phenomenon appears to occur only in competitive RTO-administered markets, which purportedly favor cheaper, but less fuel-secure, natural gas to the detriment of coal and nuclear. The DOE NOPR ties the increased reliance on natural gas (and corresponding decreased reliance on coal and nuclear) to an asserted reduction in resilience that can be fixed by only reverting these markets from competitive back to cost of service rate recovery – but only for such purported fuel-secure generators.

The narrowed scope of the DOE NOPR (from when it was originally issued to its publication in the Federal Register)⁴⁷ essentially expresses the opinion that States that have elected to rely on RTO markets to assure resource adequacy exclusively through revenues offered in their energy and capacity markets have made the wrong choice. The Federal Power Act creates a collaborative, federal-state scheme of regulation of the electricity industry, and expressly reserves to the states control over in-state “facilities used for the generation of electric energy,”⁴⁸ which includes determining the “[n]eed for new power facilities, their economic feasibility, and [retail] rates and services.”⁴⁹ By rejecting cost of service regulation in favor of markets – a decision in many cases made at the insistence of the predecessor companies that today are demonstrating a kind of buyer’s remorse – states have exercised their authority under the FPA’s jurisdictional split. The DOE NOPR implies that these States have made dangerous decisions that have brought on a resilience crisis caused by markets forcing a “premature” retirement of “fuel-secure” resources. The radical response suggested by the DOE NOPR is not merely encouragement or some form of directive that affected states reverse course and “re-regulate” generation under cost of service principles. Instead, the DOE NOPR calls for federal ratemaking that would pre-empt state preferences, frustrate state legislative

⁴⁷ *Compare Grid Resiliency Pricing Rule, Notice of Proposed Rulemaking*, Department of Energy, (Sept. 28, 2017), https://energy.gov/sites/prod/files/2017/09/f37/Notice_of_Proposed_Rule_making.pdf (“The requirements of this rule shall apply to Commission-approved independent system operators or regional transmission organizations with a day-ahead and a real-time market or the functional equivalent.”), with DOE NOPR at 46,948 (“The requirements of this rule shall apply to Commission-approved independent system operators or regional transmission organizations with *energy and capacity markets and a tariff that contains a day-ahead and a real-time market or the functional equivalent.*”).

⁴⁸ 16 U.S.C. § 824(b)(1); see *Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288, 1292 (2016).

⁴⁹ *Pacific Gas & Elec. Co. v. State Energy Resources Conservation and Development Comm’n*, 461 U. S. 190, 205 (1983).

actions and impose (contrary both to the Federal Power Act and to longstanding judicially clarified divisions of federal and state responsibilities as relates to resource adequacy) a Washington-based federal solution in lieu of actions individual states might take to meet resilience objectives. Accordingly, the DOE NOPR's singular focus on regions with capacity markets (and possibly on PJM in particular) is arbitrary and unsupported, which calls into question whether the claimed focus of the rule—i.e., resilience—is not a pretext for other objectives, such as supporting certain politically-favored resources.

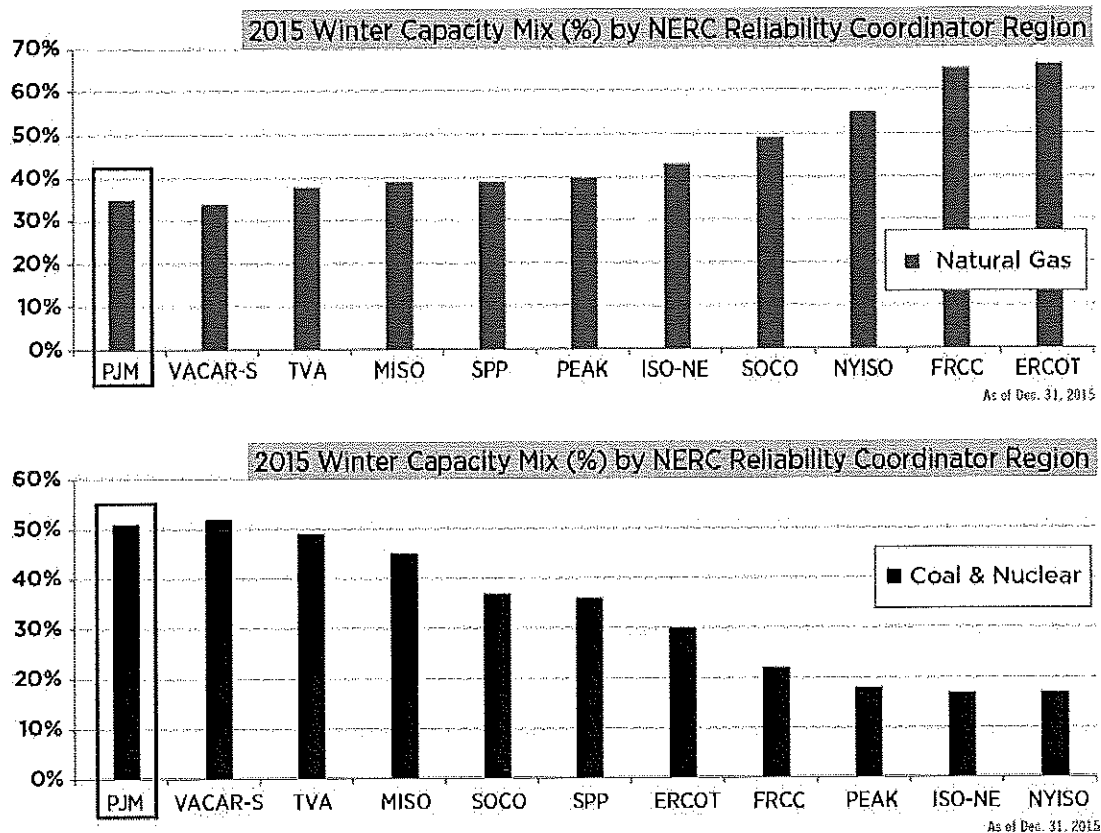
The DOE NOPR provides no explanation why RTO's with capacity markets in general or PJM's capacity market specifically are to blame for the so-called resilience crisis. In fact, evidence from the DOE's own data demonstrates that RTOs are no more affected than any other region, by resource retirements and changes in the resource mix. First, RTO regions do not rely more heavily on natural gas for winter capacity⁵⁰ than non-RTO regions, as demonstrated by Energy Information Administration data for winter 2015.⁵¹ Indeed, as shown by Figure 3, PJM's winter capacity mix showed nearly the

⁵⁰ PJM chose to review winter data because the DOE NOPR suggests that the resilience crisis is heightened in the winter due to a heavy reliance on natural gas both for power generation and heating fuel. *E.g.*, DOE NOPR at 46,942 (“Using these retiring units enabled utilities to meet customer demand during a period when already limited natural gas resources were diverted from electricity production to meet residential soheating needs. Once retired, however, these units will not be available for the next unseasonably cold winter.”).

⁵¹ The Energy Information Administration's 2015 Form EIA-860 Data - Schedule 3, 'Generator Data' (Operable Units Only), at columns: *Technology*; *Winter Capacity (MW)*; and Data - Schedule 2, 'Plant Data'; *Winter Capacity (MW)*; at columns: *Balancing Authority*; <https://www.eia.gov/electricity/data/eia860/>, (both retrieved Oct. 16, 2017), were the primary source for bar charts in Figure 3, supplemented with data from “NERC Balancing Authorities and Reliability Coordinators,” North American Electric Reliability Corporation; http://www.nerc.com/comm/OC/RS%20Landing%20Page%20DL/Related%20Files/BA_Bubble_Map_20160427.pdf; <http://www.nerc.com/pa/rrm/TLR/Pages/Reliability-Coordinators.aspx>; (Retrieved Oct. 16, 2017); and “Report on the Capacity, Demand and Reserves (CDR) in the ERCOT Region, 2017-2026,” The Electric Reliability Council of Texas; at p. 32; Dec. 15, 2016;

lowest winter reliance on natural gas and a significantly greater contribution of combined coal and nuclear resources to fulfill winter needs than almost all other NERC regions in the continental U.S.

Figure 3. 2015 Winter Capacity Mix: Natural Gas v. Coal & Nuclear Combined



As the 2015 winter capacity data demonstrate, among the regions most reliant on natural gas were ERCOT, Florida, and the Southern Company areas—all of which operate outside of Commission-approved RTOs and without RTO-administered capacity markets. PJM’s reliance on gas-fired generation is among the lowest of the regions studied. Likewise, PJM’s proportion of coal and nuclear in its winter fuel mix is higher

<http://www.ercot.com/content/wcm/lists/96607/CapacityDemandandReserveReport-Dec2016.pdf>
(Retrieved Oct. 16, 2017).

than any region (except for VACAR, which has had about the same percentage reliance on coal and nuclear) further demonstrating that the DOE NOPR's worry about overreliance on natural gas or mass retirements of coal and nuclear are no more applicable in PJM specifically or capacity markets generally, than they are in other areas of the country. Under the DOE NOPR's narrow view that "fuel-secure" resources are needed to ensure reliability and resilience, the PJM region is more fuel diverse and resilient than vast regions without capacity and energy markets, and would remain so even if PJM reduced its reliance on coal and nuclear (to, for example, the level maintained by the Southern Companies region), or increased its reliance on natural gas (to, for example, the level maintained in Florida or ERCOT).

This comparison underscores that the DOE NOPR's criteria and scope are either arbitrary and irrational or motivated by altogether different objectives than those offered as the basis for urgent action. Reliability and resilience are far more complex than the mere maintenance of a preferred class of allegedly fuel-secure resources, and the DOE NOPR offers nothing to show that there is a greater concern with either reliability or resilience in the areas, like PJM, served by capacity and energy markets.

PJM assessed the probability of generator retirements in PJM versus those in "regulated environments" (i.e., areas outside of competitive markets), and found that the "probability of the mathematically average generator retiring in PJM is lower than in the regulated environment."⁵² The analysis concludes that "[a] statistical examination of retirement data in PJM compared to regulated environments refutes any assertion that

⁵² PJM 2016 Resource Investment Whitepaper at 32.

PJM markets are prematurely retiring economically viable generation.”⁵³ Regarding the changing resource mix, PJM has explained,

[t]he electricity resource mix has shifted throughout PJM’s history, and the PJM system has proven reliable in the face of change. Adequacy and security are two key aspects of reliability. The PJM planning process and capacity market maintain resource adequacy by ensuring sufficient resources to meet demand under extreme conditions.⁵⁴

Indeed, the performance of the PJM system in response to incredibly taxing events like the 2014 Polar Vortex demonstrate the reliability and resilience of the system created by effective transmission planning and development and the energy and capacity markets. The DOE NOPR’s singular focus on capacity markets, therefore, is unjustified.

PJM and other markets also are adaptable to changes that impact reliability or resilience. The Polar Vortex presents a compelling example. Despite serving customers reliably throughout the Polar Vortex, in response to the level of forced generation outages and performance failures, PJM and other regions set about to study the underlying causes and provide solutions. PJM determined that primary operational challenges presented by events such as the Polar Vortex could be mitigated if generation suppliers made investments in weatherization or increased operations budgets.⁵⁵ PJM’s “Capacity Performance” reforms adopted market solutions to the generation challenges wrought by events like the Polar Vortex by: (1) incentivizing better performance by paying generators for performance and allowing recovery of investments to enhance operational

⁵³ *Id.* at ii.

⁵⁴ Evolving Resource Mix and Reliability Report at 8.

⁵⁵ Reforms to the Reliability Pricing Market (“RPM”) and Related Rules in the PJM Open Access Transmission Tariff (“Tariff”) and Reliability Assurance Agreement Among Load Serving Entities (“RAA”) of PJM Interconnection, L.L.C., Docket No. ER15-623-000, at 19 (Dec. 12, 2012).

reliability (e.g., firming fuel supply, investing in dual-fuel capability, increased staffing, capital investments for better operational flexibility, and cold-weather testing on alternate fuels); and (2) discouraging poor performance by imposing a strong monetary penalty (with limited exceptions).⁵⁶ Other regions affected by the Polar Vortex undertook similar market-oriented reforms in response.⁵⁷ The DOE NOPR fails to mention or consider the import of these reforms and the ability of the organized markets to address emerging needs effectively through market-based mechanisms in line with the Commission's long-standing policy of promoting competition, as opposed to the regression to cost of service ratemaking proposed in the DOE NOPR.

Moreover, the DOE NOPR flatly ignores the many tools and benefits that RTOs and their markets provide to promote resilience and reliability in the face of extreme events. RTOs possess dispatch control over extensive resources within their regions, cohesively manage transmission system reliability over large regions to ensure the delivery of those resources, provide reliability coordination and other services over a vast transmission system, optimize operating and other reserves over a wider area, and develop mechanisms such as day-ahead energy and capacity markets to ensure sufficient capacity prior to real-time. The shortsightedness of the DOE NOPR in failing to recognize these benefits suggests that reliability and resilience may not be the underlying goals of the DOE NOPR's proposal.

⁵⁶ See *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208, at P 9 (2015), *order on reh'g*, 155 FERC ¶ 61,157, at P 26 (2016), *aff'd sub nom. Advanced Energy Mgmt. All. v. FERC*, 860 F.3d 656, 670 (D.C. Cir. 2017); *ISO New England Inc.*, 147 FERC ¶ 61,172 (2014), *reh'g denied*, 153 FERC ¶ 61,223 (2015), *appeal pending sub nom. New England Power Generators Ass'n v. FERC*, No. 16-1023 (D.C. Cir. Jan. 19, 2016).

⁵⁷ See *ISO New England, Inc.*, 149 FERC ¶ 61,009, at P 17 (2014).

PJM's experience and analysis demonstrates that the DOE NOPR's focus on competitive capacity markets as the root of any perceived resilience problem is misplaced. The DOE NOPR provides no justification for undermining competitive markets in regions that have adopted robust capacity markets, while assuming that there is no similar problem outside of such markets.

B. The DOE NOPR Fundamentally Undermines Competitive Markets.

The DOE NOPR is a direct assault on competitive markets that the Commission and RTOs have spent years building and refining. By subsidizing one category of resources with full cost of service rate recovery, the DOE NOPR provides an anticompetitive advantage that will lead to uneconomic outcomes in the market. The Commission should decline to adopt the DOE NOPR as contrary to Commission and Congressional policy, and not reverse course on decades of promoting greater competition in the energy industry.

As the Commission is aware, RTO markets like PJM's are single-clearing price auctions in which the RTO clears the total amount of generation needed to serve load reliably at the clearing price that is expected to represent the marginal cost of supply. The Commission has endorsed the concept of single-clearing price markets as being superior to cost of service ratemaking:

Such competitive market mechanisms provide important economic advantages to electricity customers in comparison with cost of service regulation. For example, a competitive market with a single, market-clearing price creates incentives for sellers to minimize their costs, because cost-reductions increase a seller's profits. And when many sellers work to minimize their costs, competition among them keeps prices as low as possible. While an efficient seller may, at times, receive revenues that are above its average total costs, the revenues to an inefficient seller may be below its average total costs and it may be driven out of business. This market result benefits customers, because over time it results in an

industry with more efficient sellers and lower prices. By contrast, sellers have far weaker incentives to minimize costs under cost-of-service, because regulation forces a seller to reduce its prices when the seller reduces its cost.⁵⁸

Subsidizing certain categories of generators to prevent them from retiring fundamentally undermines the competitive market structure and displaces least cost, more efficient resources that would otherwise clear the market. Guaranteeing full cost of service recovery to certain resources permits those often higher-cost resources to offer into the market at artificially-low prices in order to guarantee that they will clear the market, knowing that they will be made whole by the subsidy. The effect is to crowd out lower cost, most efficient resources from clearing the market. Subsidies also drive down clearing prices, which provides a disincentive to invest in newer generation and new technologies, leaving in place aging, less efficient generation resources, while at the same time encouraging early retirement of lower cost, more efficient generators that cannot compete on price with subsidized generators. In short, providing full cost of service rate recovery to favored resources severely distorts market prices and investment signals, significantly degrading competitive markets, and leaves in place uneconomic, aging assets that would be forced into retirement but for the subsidy.

C. The DOE NOPR's Many Legal Infirmities Preclude Its Adoption.

The DOE's NOPR offers no defensible legal rationale for its proposal. In fact, the proposal simply cannot be reconciled with the Federal Power Act or with the policies Congress has embedded in the statute.

1. The DOE NOPR Contradicts Congressionally Endorsed Reliance On Competitive Wholesale Electricity Markets.

⁵⁸ *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331, at P 141 (2006).

Commencing with its Order No. 888,⁵⁹ the Commission has required open access transmission and has encouraged the ongoing development of wholesale power markets, including the organized, regional markets administered by ISOs and RTOs. The overriding purpose of these efforts has been pursuit of Congress's "goals of creating more competitive bulk power markets and lower rates for consumers."⁶⁰ Indeed, the Energy Policy Act of 2005, in the Commission's view, embodies a national policy "to foster competition in wholesale electric power markets"⁶¹ and "affirmed a commitment to competition in wholesale natural gas and electricity markets as national policy."⁶²

The DOE NOPR openly and irreconcilably conflicts with this national policy objective. The DOE's proposal is targeted specifically at Commission-approved RTOs and ISOs with capacity and energy markets.⁶³ If adopted, the proposed rule would

⁵⁹ *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, 1991–1996 FERC Stats. & Regs., Regs. Preambles ¶ 31,036 (1996), *order on reh'g*, Order No. 888-A, 1996–2000 FERC Stats. & Regs., Regs. Preambles ¶ 31,048, *order on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *reh'g denied*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd in part & remanded in part sub nom. Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff'd sub nom. New York v. FERC*, 535 U.S. 1 (2002).

⁶⁰ Order No. 888 at 31,673; *see also id.* at 31,644 (stating a "goal of the Energy Policy Act [of 1992] was to promote greater competition in bulk power markets"); 31,683 (stating no-action alternative would be "counter to the direction from the Congress in the Energy Policy Act and the needs of the marketplace and electricity consumers").

⁶¹ *Wholesale Competition in Regions with Organized Electric Markets*, Order No. 719, 2008–2013 FERC Stats. & Regs., Regs. Preambles ¶ 31,281 at P 1 (2008), *as amended*, 126 FERC ¶ 61,261, *order on reh'g*, Order No. 719-A, 2008–2013 FERC Stats. & Regs., Regs. Preambles ¶ 31,292, *reh'g denied*, Order No. 719-B, 129 FERC ¶ 61,252 (2009). *See also* Order No. 719-A at P 122 (in the Energy Policy Act of 2005, Congress ratified the "Commission's policy . . . to promote competition in wholesale electric power markets").

⁶² *Transparency Provisions of Section 23 of the Natural Gas Act*, Notice of Proposed Rulemaking, FERC Stats. & Regs. ¶ 32,614, at P 11 (2007).

⁶³ DOE NOPR, 82 Fed. Reg. at 46,948 (proposed amended version of 18 C.F.R. § 35.28(g)(10)(ii)). The DOE's proposed regulatory language is not entirely clear. The quoted provision would state that "[t]he

require each affected ISO/RTO to create and collect cost of service rates for each “eligible resource” under the new rule. Coal-fired and nuclear generators comprise just over fifty percent of all currently installed generation capacity in the PJM region,⁶⁴ meaning that the DOE NOPR proposal, if adopted would remove half of all the capacity in the PJM region from the discipline of competitive market forces. This outcome is clearly incompatible with “the Congressional mandate in the Energy Policy Act of 1992 to encourage competition in electricity markets.”⁶⁵ The DOE NOPR nevertheless does not even attempt to reconcile its proposed regulatory retrenchment with clear Congressional and Commission policy preference for competitive markets as reflected in the Energy Policy Acts of 1992 and 2005. This reason alone justifies rejection of the DOE’s proposal.

requirements of this rule shall apply” only to the indicated subset of ISOs/RTOs. However, the ensuing proposed subsection would state that “[e]ach Commission-approved [ISO and RTO] shall establish a tariff” that incorporates the rule’s proposed cost-plus pricing guaranty for “eligible grid reliability and resiliency resources” as the proposed rule defines them. *Id.* (proposed amended version of 18 C.F.R. § 35.28(g)(10)(iii)). For present purposes, PJM interprets “this rule” in proposed subparagraph (g)(10)(ii) to refer to the proposed regulatory language as a whole, and thus to mean that the DOE intends the new rule to apply only in the subset of regions meeting that subparagraph’s criteria. Should PJM be mistaken about the true scope of the proposal, it reserves its right to assert any objections that it may have to the proposal in its full, intended scope, regardless of whether such objections may be additional to or different from those articulated in these comments.

⁶⁴ See *supra* note 4.

⁶⁵ Order No. 888-A at 30,183.

2. *The DOE's Proposal To Guarantee Eligible Resources' Recovery Of All Costs Plus A Return Is Contrary To Law.*

The United States Supreme Court has stated that “regulation does not assure that the regulated business make a profit.”⁶⁶ The Court later added that “[t]he due process clause . . . has not and cannot be applied to insure values or to restore values that have been lost by the operation of economic forces.”⁶⁷ The DOE NOPR, in contrast, would require “pricing to *ensure* that each eligible resource . . . *recovers its fully allocated costs and a fair return on equity*,”⁶⁸ even though the DOE Staff Report acknowledges that displacement of coal-fired and nuclear generation is due in large measure to the persistently low price of natural gas—i.e., the very “economic forces” from which regulation under the FPA does not protect regulated public utilities.⁶⁹ Moreover, the DOE NOPR's generic mandate of cost recovery improperly ignores the well-established rights of states and wholesale customers to challenge the prudence of particular utility costs.

As written, therefore, the DOE NOPR would require the Commission to direct the targeted ISOs/RTOs to provide eligible resources with exactly the kind of assurances of

⁶⁶ *Mkt. St. Ry. Co. v. R.R. Comm'n*, 324 U.S. 548, 566 (1945) (citing *FPC v. Hope Nat. Gas Co.*, 320 U.S. 591, 603 (1944) (“*Hope*”)). *Accord FPC v. Nat. Gas Pipeline Co.*, 315 U.S. 575, 590 (1942) (“[R]egulation does not insure that the business shall produce net revenues . . .”).

⁶⁷ *Mkt. St. Ry. Co.* at 567.

⁶⁸ DOE NOPR at 46,948 (proposed revised text of 18 C.F.R. § 35.28(g)(10)(iii)(B)) (emphasis added). Eliminating all doubt that this language would guaranty cost recovery plus a profit for each eligible resource, the proposal goes on to clarify that “[c]ompensable costs shall include, *but not be limited to*, operating and fuel expenses, costs of capital and debt, and a fair return on equity and investment.” *Id.* (proposed revised text of 18 C.F.R. § 35.28(g)(10)(iv)) (emphasis added).

⁶⁹ *Mkt. St. Ry. Co.* at 567; *see also Associated Gas Distribs. v. FERC*, 824 F.2d 981, 1001 (D.C. Cir. 1987) (“*AGD*”) (observing the Supreme Court’s rulings that “the due process clause affords no protection from losses inflicted by market conditions” (citing *Hope*, 320 U.S. 591; *Mkt. St. Ry. Co.*, 324 U.S. 548)).

profit and protection from market forces to which the Supreme Court long ago held regulated entities are not entitled. Accordingly, the Commission cannot lawfully adopt the DOE's proposal.

3. *The DOE NOPR Proposes An Unlawful, Arbitrary and Undue Preference For Eligible Resources.*

Like the companion Natural Gas Act, the Federal Power Act “fairly bristles with concern for undue discrimination.”⁷⁰ While not all discrimination is prohibited,⁷¹ discrimination must be “undue” which occurs “when the classes are not similarly situated.”⁷² Courts will accept disparate treatment “if FERC offers a valid reason for the disparity.”⁷³

The DOE NOPR is *unduly* discriminatory and, therefore, unlawful in at least two critical respects. First, it offers no sound basis for the preferential pricing it proposes for eligible resources. Second, it explains no rationale for creating a new pricing regime for eligible resources to apply only in ISO/RTO regions that have capacity and energy markets, while leaving unchanged the jurisdictional rates of all generators (including

⁷⁰ *AGD*, 981 F.2d at 998.

⁷¹ *BP Energy Co. v. FERC*, 828 F.3d 959, 967 (D.C. Cir. 2016) (“No undue discrimination exists where there is ‘a rational basis for treating [two entities] differently’ and such differential treatment is ‘based on relevant, significant facts which are explained.’”(alteration in original) (quoting “*Complex*” *Consol. Edison Co. of N.Y., Inc. v. FERC*, 165 F.3d 992, 1012-13 (D.C. Cir. 1999))).

⁷² *PJM Interconnection, L.L.C.*, 137 FERC ¶ 61,145, at P 109 (2011).

⁷³ *Black Oak Energy, LLC v. FERC*, 725 F.3d 230, 239 (D.C. Cir. 2013) (alteration in original) (internal quotation omitted) (citation omitted). *See also Ark. Elec. Energy Consumers v. FERC*, 290 F.3d 362, 367 (D.C. Cir. 2002) (“A rate is not ‘unduly’ preferential or ‘unreasonably’ discriminatory if the utility can justify the disparate effect.” (quoting *Metro Edison Co. v. FERC*, 595 F.2d 851, 857 (D.C. Cir. 1979))); *Elec. Consumers Res. Council v. FERC*, 747 F.2d 1511, 1515 (D.C. Cir. 1984) (same).

those that otherwise might qualify as eligible resources if located in a targeted ISO/RTO footprint) in all other regions of the nation.

The courts have recognized that it may be reasonable for the Commission to draw distinctions between types or classes of resources for some purposes. PJM's minimum offer price rule⁷⁴ and Capacity Performance⁷⁵ reforms provide two such examples, which underscore the DOE NOPR's critical omission: Unlike the DOE NOPR, in adopting the PJM rules, the Commission provided a sound rationale, supported by substantial evidence, for distinguishing between certain types of resources.

Critically, in support of its proposal, the DOE cites not a single incident or event when the on-site availability of 90 days' fuel supply was or would have been the difference in maintaining reliable electric service in any of the targeted ISO/RTO regions (or anywhere else). Indeed, the DOE NOPR fails to connect its proposed 90-day on-site fuel supply criterion with prevention or mitigation of any outage or other reliability issue in any targeted market at any time. Likewise, the DOE fails to articulate why the problem only exists in RTOs and ISOs with capacity markets.⁷⁶

⁷⁴ The Commission approved applying PJM's minimum offer price rule to natural gas-fueled generators, but not to intermittent renewable resources like wind and solar generation. *See supra* note 72, *PJM Interconnection, L.L.C.*, 113 FERC ¶ 61,145 at PP 109-111, *aff'd sub nom. N.J. Bd. of Pub. Utils. v. FERC*, 744 F.3d 74 (3d Cir. 2014).

⁷⁵ The Commission and the courts accepted PJM's "Capacity Performance" reforms, which limited participation in the PJM capacity market to resources that are capable of providing energy or reducing demand on a year-round basis. *See supra* note 56.

⁷⁶ *See supra* Section II.A.4.

Because the DOE NOPR fails to articulate any rational connection between the facts it marshals, the problem it identifies, and the solution it seeks to inflict, the Commission cannot lawfully adopt it.⁷⁷

4. The Commission's Comment Deadlines Do Not Provide The Meaningful Opportunity To Comment Required By The Administrative Procedure Act.

Section 553(c) of the Administrative Procedure Act requires an agency, after publishing notice of a proposed rule, to “give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments.”⁷⁸ The purposes of these procedural requirements are to “assure[] fairness and mature consideration of rules having a substantial impact on those regulated,”⁷⁹ and to “educate[] the agency, thereby helping to ensure informed agency decisionmaking.”⁸⁰ These objectives dictate that an agency must provide a “meaningful opportunity” to comment.⁸¹ Therefore, according to the drafters of the Act, matters “of great importance, or those

⁷⁷ *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (stating that an agency must articulate “a ‘rational’ connection between the facts found and the choice made” (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962))).

⁷⁸ 5 U.S.C. § 553(c).

⁷⁹ *Pennzoil Co. v. FERC*, 645 F.2d 360, 371 (5th Cir. 1971).

⁸⁰ *Chocolate Mfrs. Ass'n v. Block*, 755 F.2d 1098, 1103 (4th Cir. 1985); *see also Nat'l Tour Brokers Ass'n v. United States*, 591 F.2d 896, 902 (D.C. Cir. 1978) (explaining that the purpose of the notice-and-comment procedure is “to allow the agency to benefit from the experience and input of the parties who file comments . . . and . . . to see to it that the agency maintains a flexible and open-minded attitude towards its own rules.”); *N.C. Growers' Ass'n, Inc. v. United Farm Workers*, 702 F.3d 755, 763 (4th Cir. 2012) (“The important purposes of this notice and comment procedure cannot be overstated. The agency benefits from the experience and input of comments by the public, which help ‘ensure informed agency decisionmaking.’” (quoting *Spartan Radiocasting Co. v. FCC*, 619 F.2d 314, 321 (4th Cir. 1980))).

⁸¹ *Prometheus Radio Project v. FCC*, 652 F.3d 431, 450 (3^d Cir. 2011) (quoting *Rural Cellular Ass'n v. FCC*, 588 F.3d 1095, 1101 (D.C. Cir. 2009)).

where the public submission of facts will be either useful to the agency or a protection to the public, should naturally be accorded more elaborate public procedures.”⁸²

The DOE proposes nothing less than for the Commission to reverse two decades of resolute reliance on market forces to ensure just and reasonable wholesale prices for electricity—a bedrock policy which, as the Commission has observed on a variety of occasions, Congress first encouraged and later ratified. The Commission’s own staff has published an extensive (though certainly not billed as exhaustive) list of questions and issues that the DOE NOPR presents, but does not address.⁸³ Nevertheless, interested parties were given a mere 13 days to comment after the DOE NOPR was published in the Federal Register.

The courts strictly enforce the APA’s procedural steps, and a comment period of “exceedingly short duration” will support a finding that an agency has failed to offer the public a meaningful opportunity to comment on a proposed rule.⁸⁴ The “instances actually warranting” a comment period as brief as the Commission is permitting here “will be rare,” and “are generally characterized by the presence of exigent circumstances in which agency action [is] required in a mere matter of days.”⁸⁵ When considered in the light of the import, scope, and potential costs to consumers of the DOE’s proposal, the DOE NOPR fails utterly to justify the extremely expedited schedule the Commission has

⁸² Administrative Procedure Act: Legislative History, S. Doc. No. 79-248, at 259 (2d Sess. 1946); Charles H. Koch Jr., 1 Administrative Law and Practice 329-30 (2010 ed.).

⁸³ *Grid Reliability and Resilience Pricing*, Letter Requesting Information, Docket No. RM18-1-000 (Oct. 4, 2017).

⁸⁴ *N.C. Growers Ass’n, Inc.*, 755 F.2d at 763, 770.

⁸⁵ *N.C. Growers Ass’n, Inc.*, 755 F.2d at 770 (citations omitted).

established, resulting in a procedural schedule that plainly falls short of the APA's minimum requirements.

III. ALTHOUGH THE LACK OF BASIS FOR THE DOE NOPR AND THE ILLEGAL REFORMS IT PROPOSES SUPPORT NOT IMPLEMENTING THE PROPOSAL, PJM BELIEVES THE AUGUST DOE REPORT APPROPRIATELY HIGHLIGHTED A PROBLEM PJM IS FACING WITH PRICE FORMATION THAT SHOULD BE ADDRESSED THROUGH REFORMS TO BE SUBMITTED TO THE COMMISSION WITHIN A COMMISSION-DIRECTED TIME FRAME

A. The Need for Targeted Consideration of This Change in the PJM Region

PJM notes at the outset that the DOE NOPR itself has directed its reforms solely to regions with energy and capacity markets. Further, given its focus on coal and nuclear units, it is clear that the region to which the DOE most directs its remedy is the PJM Region since the PJM Region has an abundance of coal and nuclear units still in service.⁸⁶ Thus, the DOE has already 'carved out' the PJM region for special recognition by the Commission. Although PJM disputes the rationale supporting the DOE's NOPR, the DOE's recognition of the need for targeted action in PJM is one with which PJM concurs.

1. PJM has Observed and Adapted to Significant Market Changes in Recent Years.

PJM's markets are resource agnostic, and have evolved over the years to include a variety of resource types including coal, natural gas steam, natural gas combustion turbine, oil steam, oil combustion turbine, nuclear, solar, wind, hydroelectric, battery/storage, and demand response. In recent years, the industry has experienced a significant fuel and technology shift to natural gas and renewable resources, prompted by

⁸⁶ See *supra* Figure 3.

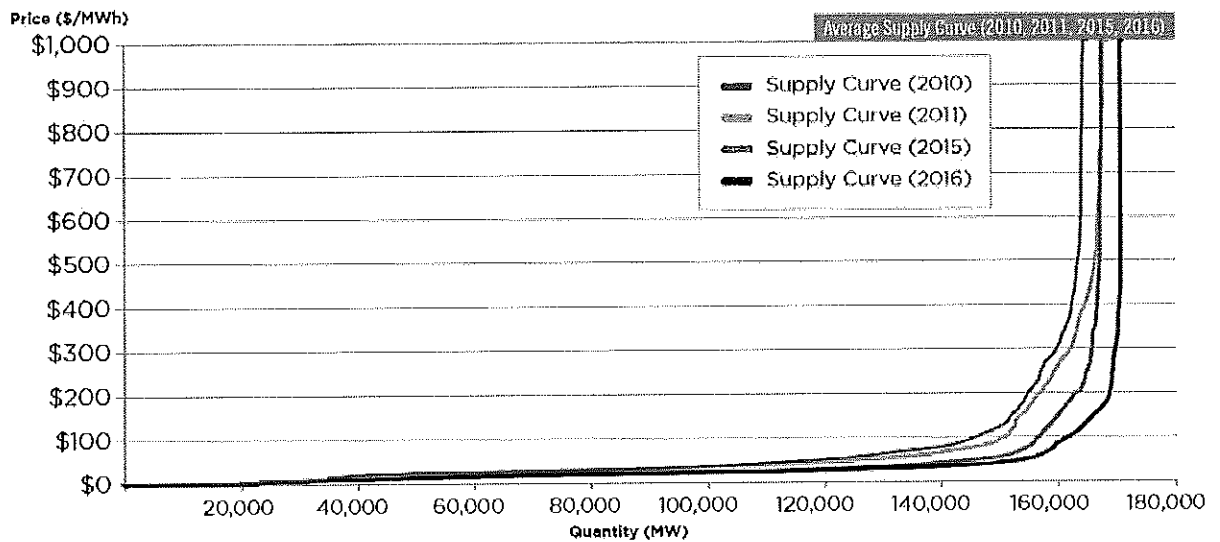
low-cost shale gas, the efficiency improvements of combined-cycle gas turbines, and the improving economics of renewable energy driven in part by government incentives. Between 2010 and 2016, coal resources comprised 79 percent of the capacity retired in PJM,⁸⁷ and natural gas and renewable resources comprised 87 percent of the new capacity in PJM.⁸⁸ By 2016, PJM's installed capacity consisted of 33 percent coal, 33 percent natural gas, 18 percent nuclear, and 6 percent renewables (including hydro).⁸⁹

PJM points out the following signs that the current environment is an opportune time to examine whether prices in the PJM energy market are formed as efficiently as possible. First, the competitive economics of combined-cycle gas turbines, assisted by low-cost shale gas and increasing renewables with zero fuel costs, has led to steadily flattening supply curves (Figure 4). The impact of this trend is particularly strong from 120,000 megawatts to 150,000 megawatts of load, the range in which peak load levels typically occur in the summer and winter. As Figure 4 shows, in 2015 and 2016 the supply curve remained relatively flat throughout this range, never reaching the point at which supply prices begin to increase significantly.

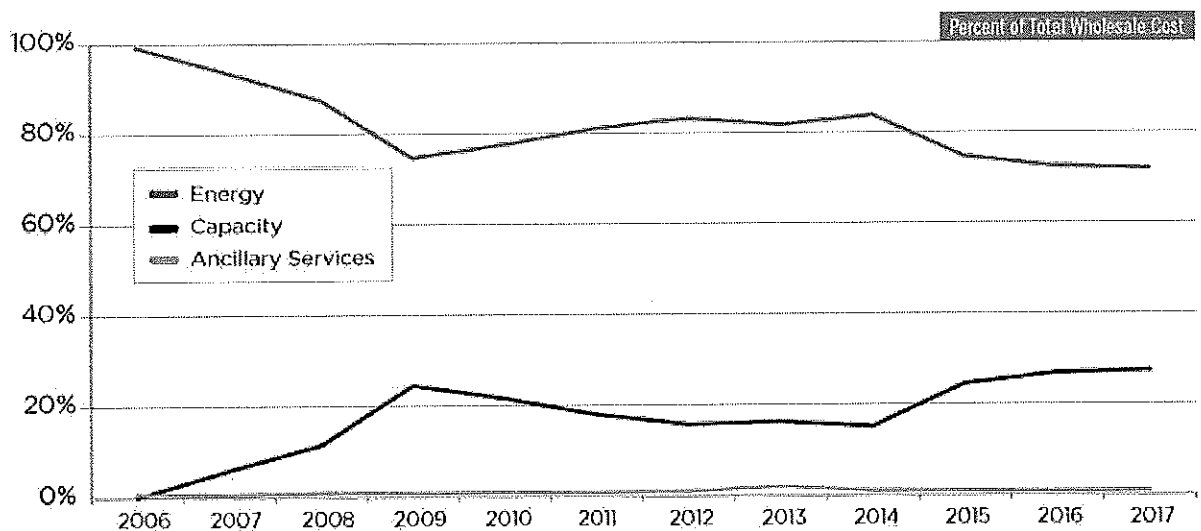
⁸⁷ See *Generation Activation Summary Sheets*, PJM Interconnection, L.L.C., <http://www.pjm.com/planning/generation-deactivation/gd-summaries.aspx> (last visited Oct. 23, 2017).

⁸⁸ See *PJM Generation Queues: Active (ISA, WMPA, etc.)*, PJM Interconnection, L.L.C. (Oct. 22, 2017, 11:35 a.m.), <http://www.pjm.com/planning/generation-interconnection/generation-queue-active.aspx>. Queue project megawatts are based on "MW placed in service" with Status Codes of IS, UC-ISP, or Active-ISP, and represent the new generation capability added to the system. Actual capacity interconnection rights may be lower based on limitations for certain fuel types or rights as specified in individual interconnection agreements.

⁸⁹ See PJM Interconnection, L.L.C., <http://www.pjm.com/~media/markets-ops/ops-analysis/capacity-by-fuel-type-2016.ashx> (last visited Oct. 23, 2017).

Figure 4. Average Supply Curves (2010, 2011, 2015, and 2016)

Also, as energy market revenues in PJM have declined, capacity market revenues have played a more significant role in generators' total revenues. (Figure 5).⁹⁰

Figure 5. Revenue Segments

⁹⁰ Revenues from the energy and capacity markets were 74.3 percent and 22.9 percent, respectively, of the total generation revenue in 2015, and 71.1 percent and 26.6 percent, respectively, in 2016. The total payments for ancillary services represent 2.8 percent of the total generation revenue in 2015 and 2.3 percent in 2016.

To the extent that these phenomena are strictly the result of supply and demand fundamentals, there would be no problem to be resolved. However, upon observance of these trends, PJM has endeavored to research whether energy market prices are accurately reflecting the value of the resources being utilized to maintain system reliability, both from the standpoint of meeting system demand as well as providing the flexibility the system operator needs to meet constantly changing conditions. Improved price formation will result in a better, more transparent reflection of the marginal resources on the system as well as create incentives for units to follow dispatch instructions and to make their units more flexible to respond to changing load demands. In general, improved price formation, as discussed more fully below, may help to ensure an appropriate mix of resources that can meet future grid demands and have clear incentives to follow dispatch instructions.

2. *The Problems PJM is Experiencing as a Result of Such Changes can be Addressed through Price Formation Reforms in PJM.*

In the case of the need for price formation reforms, the Commission should note the following characteristics which identify the PJM region as eligible for prompt remedy of the particular price formation problem noted above.

For instance, in light of the reforms to PJM's capacity market in moving to the Capacity Performance construct, reliability pricing has supplemented energy pricing to help attract efficient resource investment to meet the resource adequacy needs. However, beyond the aggregate resource attributes such as maximum economic generation and forced outage rate, the capacity market is not intended to reward flexibility attributes such as short starting time, short minimum running time, low minimum economic generation and fast ramping rate that are essential to efficiently meet operational needs.

As the availability of an appropriate mix of these flexibility attributes is essential for reliable system operation, the value of flexibility should be appropriately reflected in energy and reserve market pricing to incent the attributes needed to maintain system reliability efficiently. Going forward, this is particularly important because of, among other things, the anticipated continuing increase in distributed, intermittent resources and demand response coming on to the PJM system.

PJM believes that price formation reforms in PJM should ensure that efficient commitment and dispatch solutions are supported by efficient prices and settlement with reduced uplift and improved incentives are accomplished in ways that will be more consistent with several other ISOs/RTOs, including its neighbors MISO and NYISO that have adopted energy pricing enhancements previously and will lessen the seams issue.

Another characteristic of PJM which identifies the PJM region as eligible for prompt remedy is that, as PJM noted in its comments in response to the Commission's Fast Start Pricing NOPR,⁹¹ PJM has not yet adopted the level of reforms as other regions with respect to fast-start pricing. Other regions have already experienced the benefit of more flexible pricing methods whereas PJM has yet to make similar enhancements. Additionally, given the demographics of PJM's fleet such as the significant penetration of relatively large combined cycle natural gas units, PJM feels that an expansion is necessary to fully address price formation in PJM. Simply, PJM does not have many

⁹¹ See *Fast-Start Pricing in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Notice of Proposed Rulemaking, at P 54 (2016) ("Fast Start Pricing NOPR").

units that meet the FERC definition of “fast-start” and therefore PJM needs a broader approach that allows for regional differences.⁹²

PJM believes that the confluence of the conditions described above drives the need for a reform to certain aspects of price formation in the PJM region. The goal is to ensure price signals that foster efficient resource-investment decisions and enable participation of demand response (both energy and reserves), variable energy resources, and distributed energy resources. Efficient energy and reserve price formation, under both shortage and non-shortage conditions, would more accurately and transparently value all of the resources on the system that are needed to reliably serve load. Enhancing energy market price formation represents a beneficial and essential first step. PJM has explained its conceptual proposal to address price formation to Dr. William Hogan, Ph.D., described below. In a letter to PJM, Dr. Hogan expressed his concurrence stating:

PJM staff is proposing to reform the existing pricing model in order to ensure that the cost of serving load is reflected in LMP to the fullest extent possible, uplift is reduced and incentives are maintained. This follows the principles of sound market design. Enhanced energy market price signals will strengthen performance incentives in PJM’s markets and is complementary to other reforms being considered by PJM. Given my knowledge of the PJM resource profile, this reform would be an appropriate step forward in price formation for the PJM region.⁹³

While enhancements to the LMP calculation in these other ISOs/RTOs have focused on fast-start resources, PJM believes it needs to enhance price formation as it

⁹² PJM Interconnection, L.L.C. Comments to Notice of Proposed Rulemaking, Docket No. RM17-3-000, at 4 (Feb. 28, 2017).

⁹³ Letter to Mr. Stu Bresler, Sr. Vice President Operations & Markets, PJM Interconnection, L.L.C. from William W. Hogan, RE: PJM Price Formation, October 23, 2017, included as Appendix B.

relates to all resource types. PJM's resource mix is different than other regions. In particular, natural gas resources in PJM are not limited to fast-start combustion turbines, but rather are represented by significant quantities of larger, combined cycle units. These resources are competing directly with other resource types, and it therefore does not make sense to limit the price-setting contribution discussed here to only the fast-start class of units, but rather to enhance price formation such that it is neutral to fuel source or resource class such that all units have the opportunity to compete comparably.

Identification of the need for price formation reforms will not create new seams issues between PJM and its neighbors. For one, MISO and PJM already depart from how prices are formed with MISO utilizing its ELMP method. By the same token, New York does currently employ a hybrid-pricing methodology that appropriately allows inflexible resources to set prices in their region when needed. These differences in pricing practices have not inhibited efficient coordination on the seams and have not resulted in any reliability concerns. Further, neither of those regional changes have inhibited the free flow of energy across the various borders PJM has with its neighbors. The RTOs have worked hard to address those seams issues over the years. The mere existence of different pricing regimes is already inherent in the Commission's deference to regional solutions. To now use this as a sword to thwart an individual region's initiatives will drive the nation to a 'lowest common denominator' solution which serves no region well in the long run.

B. PJM is Setting Forth a Framework for Price Formation Reforms Needed in the PJM Region in the Near Term.

PJM describes herein price formation reforms it is considering to address the problems identified above in the near term. The framework below explains the issue in terms of convexity and non-convexity, in recognition of a technical condition that is essential to addressing the concerns raised with inflexibility. In basic terms, PJM finds itself increasingly in a state of non-convexity which in turn requires payments be made to resources outside of LMP through make whole payments which in turn has led to increased uplift, reducing incentives for flexibility. PJM proposes a way in which such uplift can be minimized.

1. Marginal Cost Pricing and the Convex Condition

Fundamentally, energy price formation is built on the foundation of marginal cost pricing. Marginal cost pricing means that the price is set equal to the incremental cost to produce the last unit of output or, equivalently, the potential increase in system cost if the last-cleared competitive unit were unavailable to serve the demand. In principle, marginal cost pricing enables full cost recovery in competitive markets under the “convex condition.” The convex condition means that the incremental cost of production rises when a generating unit’s output increases, and declines when a generating unit’s output decreases. Under the convex condition, the last-cleared unit is always the highest-ranking unit in the merit order with the highest cost. The optimal strategy under the convex condition is for each generating unit to bid its true costs and physical characteristics.

An inflexible generating unit with a minimum operational limit fails the convex condition because when the output decreases below the minimum operational limit, the cost rises, making it uneconomical to run the unit in that range.⁹⁴ Under non-convex conditions, producers may incur losses if the price is set at marginal cost. Fundamentally, in the presence of non-convexity, there are no market prices that can support competitive market solutions without requiring additional payments through, for example, make whole payments and resulting uplift mechanisms. In wholesale electricity markets with LMP, two different LMP pricing methods have been used to support competitive market solutions under the condition of non-convexity: the restricted LMP method and the extended LMP method.

a. Current LMP Method

The current LMP method was chosen for the initial implementation of the PJM energy market primarily because of its simplicity. The current LMP method ignores the presence of non-convexity in its price-setting logic and assumes that certain units, or certain output ranges of units, are ineligible to set price when they fail the convex condition. It employs a single security-constrained economic dispatch (“SCED”) model for both dispatch and pricing purposes. In the SCED model, only flexible units are eligible to set price, and the costs for inflexible units are excluded in the pricing run, calculating the marginal system costs and determining the market clearing prices.⁹⁵

⁹⁴ In electricity markets, non-convexity also arises for other technical reasons, such as fixed start-up/no-load costs, economies of scale and inflexibilities such as minimum-generation or block-loading requirements.

⁹⁵ FERC recently sought to address the ability of inflexible fast-start units in the Fast-Start Pricing NOPR. FERC’s proposal would require the dispatch and pricing of the system to be done separately so that inflexible fast-start units could be made flexible in order to set prices. FERC’s proposal also sought to include startup and no load for these resources in pricing.

As a result, there have always been circumstances where prices could fail to reflect all elements relevant to sending the right market signals. Specifically, when certain inflexible units are required to serve load but ineligible to set price, and the current LMP method inappropriately lowers energy prices, an uplift payment to the inflexible units is required in order to ensure that their costs are fully recovered. These uplift payments are detrimental to the overall operation of the market because market participants that must pay these costs are unable to predict or hedge against them.

Significant effort has been invested in minimizing these uplift costs over time, including putting limitations on the physical parameters that generating units may submit as part of their offers into the market. However, efficient dispatch processes can only minimize the resulting uplift so much. PJM has been required to create rules to limit physical parameters over the years due to the incentives created by the uplift payments. Currently, resource operators have the incentive to make units as inflexible as possible while still being committed by PJM in order to maximize the uplift payments they can collect.

b. Extended LMP Method

PJM is actively exploring a transition to the extended LMP method.⁹⁶ In the extended LMP method, the conditions that cause non-convexities are relaxed in a pricing run executed separately from the dispatch run in a procedure known as convex relaxation. A dispatched inflexible unit needed to serve load would be treated like a flexible unit and be allowed to set price. Prices that reflect the incremental costs of the most expensive

⁹⁶ For a description of the extended LMP method, see Gribik, P. R., W. W. Hogan, and S. L. Pope, *Market-Clearing Electricity Prices and Energy Uplift*, John F. Kennedy School of Government, Harvard University (2007).

units needed to serve load benefit supply resources with lower costs, making offers from flexible or inflexible units competitive. As a beneficial result, the extended LMP method effectively rewards flexibility, reducing reliance on the uplift payments with improved price signals that incent resource performance in market operations. These incentives will be necessary in the future, as the PJM system continues to experience further penetration of intermittent resources.

A defining characteristic of the extended LMP method is that it bifurcates the SCED model into two separate runs: the dispatch run and the pricing run.⁹⁷ This bifurcation already occurs in regions such as MISO, ISONE, and NYISO who all have a sophisticated procedures for fast-start pricing. In the method PJM is investigating, the dispatch run is the same as in the current LMP method and the pricing run is a convex relaxation of the SCED dispatch run. In the pricing run, the inflexible generation units compete with the flexible units and are eligible to set the energy price when they are needed to meet the demand or control transmission constraints. With appropriately designed uplift payments, extended LMP can support efficient commitment and dispatch solutions, because market participants should have no incentive to deviate from the solution and (to a large extent) have no incentive to submit offers that differ from their true costs. The Commission has already shown its comfort with different price setting methods given that both of these price setting methods are in place.⁹⁸

⁹⁷ See *supra* note 96.

⁹⁸ *Midwest Independent Transmission System Operator, Inc.*, 140 FERC ¶ 61,067 (2012).

2. Shortage Pricing

In addition to exploring a more robust method to determine LMPs, PJM also believes that reforms to its shortage pricing rules would benefit price formation and incentivize appropriate behavior that could mitigate operational reliability concerns. Currently, PJM implements shortage pricing if its system is short of 10-minute reserves, which from a reliability perspective would constitute a grave operating condition. Ideally, the market should appropriately incentivize activity to avoid these occurrences. However, once in that condition, market prices should reflect the severity of the condition. Modeling and invoking shortage pricing for longer-term reserve products such as 30-minute reserves would provide better incentives and information to the market regarding potentially severe operating conditions by escalating energy and reserve prices earlier and incentivizing behavior that would ameliorate the condition.

Further, PJM is examining the level and shape of its operating reserve demand curves (“ORDC”). The current ORDCs used in PJM are step functions that are based on PJM’s nominal reserve requirement, which is a function of the largest unit operating on the system. As such, they do not accurately reflect the value of excess reserves on the system in a manner consistent with the reliability value of those reserves. PJM also is investigating the penalty factor levels associated with these curves to ensure they accurately reflect the value that reserves provide to the system under all operating conditions. While PJM recently made incremental changes to its ORDCs, a wholesale review of these curves has not been done since PJM implemented shortage pricing in 2012. To ensure PJM comprehensively addresses all facets of price formation, and

considering potential changes to the LMP methodology and reserve products considered for shortage pricing, now is also an appropriate time to review shortage pricing in PJM.

C. PJM Suggests a Focused Commission Process.

As explained herein, the Commission should act now to ensure that essential reliability services that resources provide are maintained. Reforms are needed in PJM now to ensure that (i) the cost of serving load is reflected in LMP to the fullest extent possible, (ii) uplift is reduced and (iii) proper economic incentives are maintained. Enhanced energy market price signals will strengthen performance incentives in PJM's markets and is in line with other reforms being considered by PJM. PJM understands not all regions face the same need for action. An extensive record has been developed to date in this area in the Commission's price formation proceedings, as confirmed by the August DOE Report. Thus, to move forward, the Commission should direct each RTO/ISO to identify for the Commission whether changes in the resource mix has created issues in their respective regions that are currently not addressed in the market. If any issues exist, the RTO/ISO should prioritize the issues of most consequence to that region and provide, within a Commission-specified deadline that is in the near term, for the submission of proposals, if necessary. In the alternative, the Commission could expand the scope of its existing open price formation NOPRs to provide for regional solutions around the issues it has broadly identified in those dockets.

IV. CONCLUSION

For the foregoing reasons, PJM respectfully requests that the Commission decline to adopt the DOE NOPR (as unsupported) and, in its place, issue an order as discussed herein.

Respectfully submitted,

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October 23, 2017

APPENDIX A
to
PJM COMMENTS IN RM18-1-000
OCTOBER 23, 2017

APPENDIX A

PJM'S RESPONSES TO SPECIFIC QUESTIONS RAISED BY OEPI IN DOCKET NO. RM18-1-000

I. Need for Reform

Question 1

What is resilience, how is it measured, and how is it different from reliability? What levels of resilience and reliability are appropriate? How are reliability and resilience valued, or not valued, inside RTOs/ISOs? Do RTO/ISO energy and/or capacity markets properly value reliability and resilience? What resources can address reliability and resilience, and in what ways?

PJM Response

For PJM, resilience means the ability to prepare, operate through, and recover from high-impact, low-frequency threats such as extreme weather, electromagnetic pulses, geomagnetic disturbances, earthquakes, cyber and physical attacks, and fuel security limitations.¹ PJM defines the three elements of resilience as:

- Prepare – evaluating and cost-effectively mitigating risks
- Operate – managing through a high-impact disruption
- Recover – regaining essential functions as rapidly as possible

Resilience requires coordinated efforts with operations, transmission and infrastructure planning, business continuity, cyber and physical security, risk management and markets.

PJM is required to plan for and operate transmission system in a manner that meets the mandatory reliability standards under the section 215 of the Federal Power Act, 16 U.S.C. section 824o, as developed and proposed by the North American Electric Reliability Corporation (“NERC”) and accepted by the Commission. These standards address all aspects of reliability including Resource and Demand Balancing, Critical Infrastructure Protection, Communications, Emergency Preparedness and Operations, Facilities Design, Connection, and Maintenance, Interchange Scheduling and Coordination, Interconnection Reliability Operations and Coordination, Modeling, Data, and Analysis, Nuclear, Personnel Performance, Training and Qualifications, Protection and Control, Transmission Operations, Transmission Planning, and Voltage and Reactive. “Reliable operation” is defined under the FPA as:

¹ Industry groups have similar definitions. See, e.g., the North American Transmission Forum in September 2017 paper on transmission system resilience which can be found at the following URL:
<http://www.natf.net/docs/natf/documents/resources/transmission-system-resiliency-an-overview.pdf>

operating the elements of the bulk-power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cybersecurity incident, or unanticipated failure of system elements.²

The PJM system meets existing standards of reliability.

Resilience addresses challenges and emerging risks *that reliability standards do not address* in order to withstand a prolonged, large-scale outage. Resilience for the bulk-electric system entails:

- Maintaining reliability in the face of significant events
- Incorporating high-impact, low-frequency threats into planning and procedures
- Slowing disruptive events, mitigating their impacts and quickly recovering essential functions
- Protecting essential systems based on assessed risks and hazards
- Improving grid flexibility and control to be able to adapt efficiently and quickly to changed conditions

As discussed in the body of PJM's response³ PJM regularly considers factors that could impact the reliability and resilience of the PJM system. Further, PJM and its stakeholders are continuing to examine resilience-related low-probability and high-impact events that could cause reliability impacts to the PJM system.

Given the changing nature of the fleet and a new set of threats that were not anticipated under the current NERC standards, prudent planning and operations requires the anticipation and mitigation of potential future occurrence of events, such as:

- sustained supply-chain issues
- environmental restrictions that limit operations of an entire fleet of fossil generators
- a nuclear disaster, which causes regulatory reaction for new and existing nuclear fleet
- a single incident causing major, multiple pipeline or supply disruptions for the natural gas fleet or oil fleet
- a major impact to a large portion of the transmission infrastructure that forces an outage lasting for days, such as a major natural disaster that impacts large sections of grid including resources and the infrastructure that connects the resources to consumers

² 16 U.S.C. § 824(a)(4) (2010).

³ PJM Comments at sections II.A.2 and 3.

To that end, PJM has created a Resilience Roadmap⁴ to use in exploring opportunities with its stakeholders, through the stakeholder committees, for addressing resilience. This includes review resilience opportunities from the perspective of transmission planning, operations, including gas/electric coordination and fuel security, markets, and cyber and physical security. Detailed discussions of these efforts are held at the Operating Committee, the Markets and Implementation Committee and/or the Planning Committee, as appropriate. And, to further collaboration with a variety of government and industry stakeholders, PJM is increasing its emphasis on cross-sector coordination.

Given the early stages of this collaboration, the next steps for PJM and stakeholders include defining metrics for resilience and criteria for evaluating potential mitigating actions not limited to generation as was the focus of the DOE NOPR, but rather also to include transmission, operations, cyber and physical security, and advanced system restoration.

Question 2

The proposed rule references the events of the 2014 Polar Vortex, citing the event as an example of the need for the proposed reform. Do commenters agree? Were the changes both operationally and to the RTO/ISO markets in response to these events effective in addressing issues identified during the 2014 Polar Vortex?

PJM Response

As described more fully in the body of PJM's comments,⁵ there is no valid basis for the proposed reform, including the 2014 Polar Vortex or any other extreme weather events cited. Indeed, NERC's Polar Vortex Review found:

Extreme cold weather also had a major impact on generator equipment. Of the approximately 19,500 MW of capacity lost due to cold weather conditions, over 17,700 MW was due to frozen equipment. Many outages, including a number of those in the southeastern United States, were the result of temperatures that fell below the plant's design basis for cold weather. At the height of generation outages (January 7 at 0800) the southeastern United States accounted for approximately 9,800 MW of the outages attributed to cold weather.⁶

⁴ The Resilience Roadmap can be found at the following URL: <http://pjm.com/~media/committees-groups/committees/oc/20170606/20170606-item-18-resilience-roadmap.ashx>.

⁵ PJM Comments at sections II.A, B, and C.

⁶ NERC Polar Vortex Review – 2014 at 12. The report can be found at the following URL: http://www.nerc.com/pa/trm/January%202014%20Polar%20Vortex%20Review/Polar_Vortex_Review_29_Sept_2014_Final.pdf.

And, of the generation that was lost due to fuel supply, all generation resource types, with the exception of wind and demand response, performed poorly. PJM explained to the Commission that at the time of the peak demand hour on January 7:

- approximately 22 percent of total installed generation capacity in PJM (of all fuel types) was unavailable because of forced outages associated with routine equipment breakdowns, problems related to operating in extreme cold temperatures and, fuel-supply issues.
- gas interruptions were *not* the major driver of the high forced outage rates experienced in the PJM region.
- Natural gas interruptions removed less than five percent of the total capacity required to meet demand on January 7
- Equipment issues associated with both coal and natural gas units made up the far greater proportion of forced outages⁷

To be sure, the 2014 Polar Vortex exposed some electric industry vulnerabilities associated with the transportation of natural gas to generators in the PJM region. This is a work in progress.

PJM has taken a number of actions since the 2014 Polar Vortex to improve generation performance, many of which were implemented by winter of 2015 and did result in a reduction in total forced outages of 15,395MWs (38.3%) on the two dates shown in Figure 1 below under similar temperature, weather and system loads.

⁷ *Winter 2013-2014 Operations and Market Performance in Regional Transmission Organizations and Independent System Operators*, Statement of Michael J. Kormos Executive Vice President – Operations, PJM Interconnection, L.L.C. at 3-4, Docket No. AD14-8-000 (May 15, 2014) (“Kormos Statement”).

Figure 1: Comparison of Outages by Primary Fuel⁸

Figure 19. Outages by Primary Fuel Feb. 20, 2015

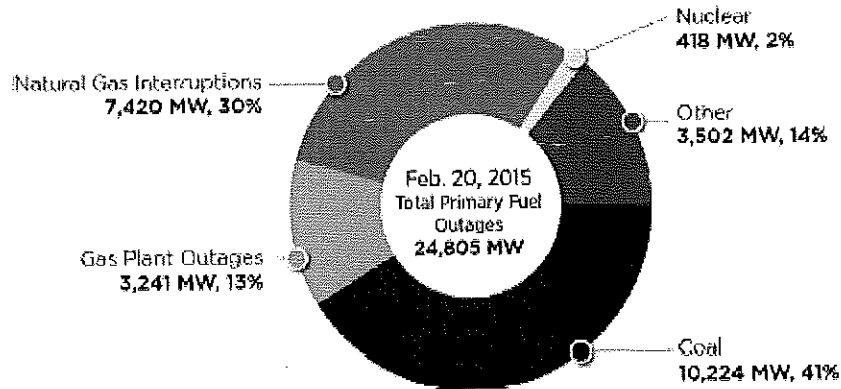
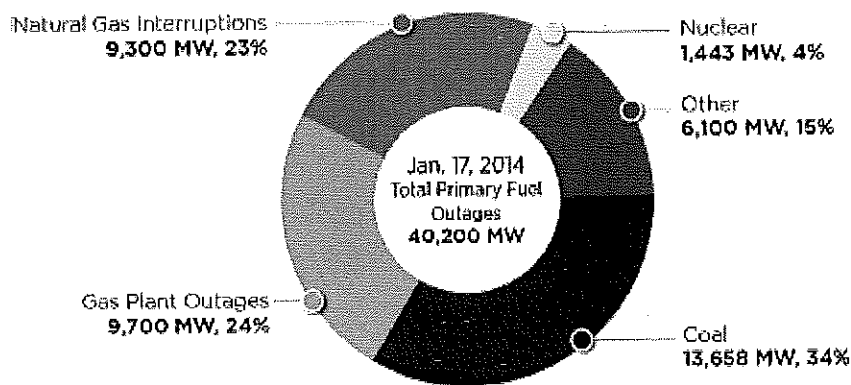


Figure 20. Outages by Primary Fuel Jan. 7, 2014



Changes implemented in advance of the 2015 winter included:

- Development of a Cold Weather Preparation Guideline and Checklist.
 - Utilized annually to prepare generators for extreme cold weather
 - PJM Manual 14D: Attachment N
- Implementation of the Generation Resource Operational Exercise.

⁸ See *2015 Winter Report* at 21 (May 13, 2015) which can be found at <http://pjm.com/-/media/library/reports-notices/weather-related/20150513-2015-winter-report.ashx?la=en>.

- PJM identifies units that did not operate, or operate on its alternate fuel, in the 8 weeks prior to Nov 1st, and also on a rolling two week basis through mid-December, and will schedule a test of the unit to ensure operability on either the primary or alternate fuel.
- PJM also provides cost recovery for the tests for any non-Capacity Performance units.
- Improved generator fuel supply surveys with enhanced focus on fuel supply and emissions limitations.
- Improved gas-electric coordination including secure data exchange with information sharing of pipeline restrictions and gas fired generation nominations in the day ahead market.
- Improved tools for better situational awareness with a geographic information system including gas pipelines and associated generation and locational visibility to curtailable load in the Dispatch Interactive Mapping application.

These actions by PJM as well as the generation owners to improve generator performance and communications were effective in reducing generator outages. In many cases however, these actions are voluntary and thus PJM has taken other steps to improve performance.

For instance, PJM evolved its capacity market to the Capacity Performance construct which is aimed at incentivizing performance not by proscribing specific requirements for each fuel type, but, rather, incentivize better performance in a resource-neutral way. Through stricter performance requirements, incentives and charges for non-performance, Capacity Performance holds capacity resources accountable to make the necessary investments and operational improvements required to ensure delivery of energy when needed most. These investments include not only firming fuel supply, and investing in dual-fuel capability (which combines back-up oil fuel with primary natural gas fuel), but also will also provide incentive to make investments to ensure the generator equipment itself will perform better under extreme cold (more insulators, heaters, etc.), increased staffing, capital investments for better operational flexibility, and cold-weather testing on alternate fuels. These investments are based on risks to performance that a resource can anticipate, plan for, budget for and implement.

Another area in which PJM has made improvements relates to the operating challenges that the daily market timing differences in the two industries pose for generators scheduling gas. In effect, gas delivery to generators begins ten hours after PJM's operating day begins at midnight. Generators must straddle two consecutive gas operating days to cover one electric operating day, thus complicating gas procurement for generation. To mitigate this operational challenge and at the direction of the Commission in Order No. 809,⁹ PJM changed the timing of the Day-Ahead

⁹ *Coordination of the Scheduling Processes of Interstate Natural Gas Pipelines and Public Utilities*, Final Rule, 151 FERC ¶ 61,049 (2015).

Market to better align with the natural gas pipelines' nomination timelines. Under the new schedule, PJM posts Day-Ahead Market results by no later than 1:30 p.m. eastern, which is in advance of a new 2 p.m. eastern Timely Nomination cycle deadline for generators to procure the delivery of natural gas to their units. These changes went into effect on April 1, 2016.

As a result of the described changes, PJM believes it is well prepared for an extreme winter event.

Question 3

The proposed rule also references the impacts of other extreme weather events, specifically hurricanes Irma, Harvey, Maria, and superstorm Sandy. Do commenters agree with the proposed rule's characterization of these events? For extreme events like hurricanes, earthquakes, terrorist attacks, or geomagnetic disturbances, what impact would the proposed rule have on the time required for system restoration, particularly if there is associated severe damage to the transmission or distribution system?

PJM Response

As explained in more detail in the body of PJM's comments¹⁰ PJM does not agree with the proposed rule's characterization of the listed weather events. To the contrary, extreme weather events impact distribution and in some cases transmission much more readily than generation resources' operational failures or lack of fuel supply. And, as a result of the impacts to the transmission and distribution systems, generation resources typically are rendered undeliverable during and immediately following such weather events, regardless of the status of the resource itself.

This point is supported by NERC's "Hurricane Sandy Event Analysis Report," which evaluated the storm's impact on the bulk power system, including both generation and transmission assets. NERC found that "[w]hile there was sufficient generation capacity available to meet the load as restoration progressed; there were some cases where customer restoration was hindered by local area transmission outages."¹¹ NERC's evaluation found that "[o]ver the course of the event, 20,007 MW of generation capacity was rendered unavailable,"¹² including what

¹⁰ PJM Comments at section II.A.

¹¹ *Hurricane Sandy Event Analysis Report*, North American Electric Reliability Corporation at 5 (Jan. 2014), <http://www.nerc.com/pa/irm/ea/Oct2012HurricaneSandyEventAnalysisRptDL/> ("NERC Hurricane Sandy Report").

¹² *Id.*

DOE calls “fuel secure” nuclear, coal, and other fossil fuel resources.¹³ The same can be said with respect to the devastation caused by hurricane Maria, where roughly 80% of the transmission system in Puerto Rico is above ground, and they lost approximately 75% percent of that infrastructure (in other words, 60% of all their transmission towers/lines were knocked down). As far as distribution goes, the loss was higher with about 85% of all lines/pole damaged or destroyed. The lead time associated with getting those pieces back is the true reason behind the length of this outage. Capacity was available within 72 hours of the event (and still is), but they can’t get it connected to load.

Another factor that underscores the lack of basis concerning the DOE NOPR is that coastal nuclear facilities located in the PJM Region adhere to varying protocols whereby they may choose to shut down when sustained high winds, in some cases as low as 42 MPH, are expected.

Question 4

The proposed rule references the retirement of coal and nuclear resources and a concern from Congress about the potential further loss of valuable generation resources as a basis for action. What impact has the retirement of these resources had on reliability and resilience in RTOs/ISOs to date? What impact on reliability and resilience in RTOs/ISOs can be anticipated under current market constructs?

PJM Response

Resource diversity is a valid topic of study, and PJM regularly examines the potential reliability impacts of a changing resource mix, including impacts associated with coal plant retirements driven by the high compliance costs of the United States Environmental Protection Agency’s Mercury and Air Toxics Standards. As discussed above, the retirement of those resources has had no significant impact on reliability as defined by the relevant NERC criteria, and PJM has not identified the retirement of coal and nuclear resources as a material reliability concern under current market constructs. As discussed in the Evolving Resource Mix and Reliability Report, PJM can operate reliably at much higher levels of natural gas and renewables, and much lower levels of coal and nuclear. PJM’s analysis revealed that operational reliability would be maintained even if all coal and nuclear resources in the expected near-term portfolio retire, and are replaced exclusively by natural gas.¹⁴

¹³ NERC also identified “[s]everal generation operation risks” from the storm, including: (1) increased potential for Loss of Off-site Power to nuclear facilities; (2) possibility of LOOP due to switchyard damage, or loss of normal condenser cooling and loss of availability of service water due to high water; (3) precipitator fly ash buildup and higher gas flow pressure due to operating without auxiliary feeds; (4) curtailments due to wet coal, which is normal with any significant precipitation; (5) danger from the loss of building siding; and (6) potential lack of fuel due to damage to the fuel provider’s facilities. *Id.* at 23.

¹⁴ See PJM’s *Evolving Resource Mix and System Reliability* at 5 & n.15 (March 30, 2017) (“Evolving Resource Mix and Reliability Report”), which can be found at the following URL: <http://www.pjm.com/~media/library/reports-notices/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx>

“Resilience” (or lack thereof) within the resource context, as distinguishable from reliability, was not adequately defined in the DOE NOPR, but PJM understands it generally as a risk metric that potentially could be addressed through resource portfolio diversification. Therefore, in a theoretical sense, some improved measure of resource or fuel diversity or flexibility could potentially improve resilience because of a more diversified portfolio of resilience-related attributes, however identified or defined. For example, on-site liquid fuel for dual-fuel combustion turbines, as acknowledged under PJM’s Capacity Performance construct, narrowly could be viewed as a resilience-related attribute under some reliability scenarios associated with the natural gas pipeline infrastructure and gas-electric coordination. However, resilience, as distinct from reliability, typically is not viewed only within a narrow resource context. Instead, resilience typically is viewed within the context of the entire bulk electric system, and relates to preparing for, operating through, and recovering from a high-impact, low frequency event.¹⁵ Resilience involves protecting the bulk electric system as a whole and must take into consideration myriad aspects of the system such as transmission and distribution infrastructure, fuel security such as through gas/electric coordination, markets, physical and cyber security, and advanced system restoration. Therefore, the DOE NOPR’s emphasis on resilience as a resource issue is mostly misplaced.

Question 5

Is fuel diversity within a region or market itself important for resilience? If so, has the changing resource mix had a measurable impact on fuel diversity, or on resilience and reliability?

PJM Response

Yes, fuel diversity within a region or market is important for resilience. The current resource mix in PJM is the most fuel diverse it has ever been, and recent changes in the resource mix have positively impacted fuel diversity by incorporating a larger percentage of natural gas and renewables. If we proceed from the theoretical proposition that portfolio diversity reduces risk, we can reasonably surmise that PJM’s increased fuel diversity, and the flexibility it provides, has *reduced* resilience and reliability risks. However, as indicated in the Evolving Resource Mix and Reliability Report, more focused research on the topic of resilience may be needed, including identifying and defining resilience attributes.¹⁶

Indeed, while PJM has taken steps such as its Capacity Performance reforms and winter preparedness in response to the extreme weather conditions during the 2014 Polar Vortex, PJM believes more work should be undertaken with respect to ensuring resource performance and fuel security. That is, even though PJM’s resource mix is diverse, PJM will continue efforts to review system resilience from a fuel security perspective and will continue to evaluate generation performance incentives.

¹⁵ See *Id.* at 5 and n.16.

¹⁶ *Id.* at 6-7.

II. Eligibility

A. General Eligibility Questions

Question 1

In determining eligibility for compensation under the proposed rule, should there be a demonstration of a specific need for particular services? What should be the appropriate triggering and termination provisions for compensation under the proposed rule?

PJM Response

Yes, there must be a demonstration of need to support compensating any resource on our system on an out-of-market basis for any wholesale service it provides. RMR agreements today need to be justified before the Commission and are limited both in scope and duration. PJM does not believe that a sweeping designation of all units, irrespective of their location, cost structure or performance record is an appropriate substitute for market-based solutions and the very limited and targeted out-of-market solutions as a backstop. For all the reasons presented in the body of PJM's comments¹⁷ PJM does not believe there has been a demonstration of need for the proposed cost-of-service compensation to, in effect, coal and nuclear resources.

Nevertheless, to the extent the Commission seeks to value the resilience attributes of a resource through a cost-of-service rate, an approach similar to a reliability must run¹⁸ concept, which is in place today, could, under certain limited circumstances under RTO-specific rules, could provide a far more appropriate model. First, there would need to be well-defined criteria for determining if the resource is, in fact, needed for resilience to ensure a resource is actually needed for such service. Second, just like PJM's reliability must run provisions which are time-limited to the time between when a resource would seek to retire, and the time it takes to mitigate the impact of such retirement, so too should any RMR-like cost recovery be limited to the time in which the resilience attributes defined by the criteria are replaced.

Question 2

As the proposed rule focuses on preventing premature retirements, should a final rule be limited to existing units or should new resources also be eligible for cost-recovery? Should it also include repowering of previously retired units? Alternatively, should there be a minimum number of MW or a maximum number of MW for resources receiving cost-of service payments

¹⁷ PJM Comments at section II.A., B., and C.

¹⁸ PJM's reliability must run rules are contained in the deactivation section of its Open Access Transmission Tariff ("Tariff"), Part V. These rules provide a mechanism for compensating a generation resource to remain on line despite a documented plan to retire, if loss of such unit presents a reliability issue. But, the compensation is provided only until such time any reliability mitigation measures, such as a new generation resource coming on line or a transmission solution is in service, are in place.

for resilience services? If so, how should RTOs/ISOs determine this MW amount? Should this also include locational and seasonal requirements for eligible resources?

PJM Response

PJM does not agree with the premise of the proposal.

Question 3

Are there other technical characteristics that should be required for an eligible unit besides on-site fuel capability? If so, what are those technical characteristics and what benefits do they provide? What types of resources can meet the proposed eligibility criteria of the proposed rule? What proportion of total current generating capacity does this represent?

PJM Response

See prior responses in this section.

Question 4

If technically capable of sustaining output for a sufficient duration (and meeting other relevant requirements), should resources such as hydroelectric, geothermal, dual-fuel with adequate on-site storage, generating units with firm natural gas contracts, or energy storage (each of which might have a demonstrable store of energy to draw upon to sustain an electrical output, if not necessarily fuel) also be eligible? Why or why not? If technical capability is the appropriate criterion for eligibility, what specific technical capability should be required to be eligible?

PJM Response

The Staff's noting of the attributes of these particular resources in this question points out the unworkability of the DOE's arbitrary designation of a more narrow set of resources when different types of units provide different but needed reliability attributes to differing degrees.

Question 5

The proposed rule would require that eligible resources be able to provide essential energy and ancillary reliability services and includes a non-exhaustive list of services. What specific services should a resource be required to provide in order to be eligible?

PJM Response

See response to prior questions in this section.

Question 6

The proposed rule would limit eligibility to resources that are not subject to cost of service rate regulation by any state of local regulatory authority. How should the Commission and/or RTOs/ISOs determine which resources satisfy this eligibility requirement?

PJM Response

The DOE NOPR requires an examination of the regulatory structure as well as revenue streams available to individual coal and nuclear units. This is not an easy task given that in a number of cases, states do not operate under pure cost of service ratemaking which ties specific dollars to specific plants. As a result of rate settlements and the bundled nature of ratemaking, returns are not established on a unit by unit basis in the state ratemaking process. For this reason, PJM is not clear how the DOE intends FERC to actually implement this identification. Nevertheless, this examination and categorizing of different regulatory regimes is not a matter that should be assigned to the RTOs as it is outside of their core mission or area of expertise.

B. 90-day Requirement

Question 1

The proposed rule defines eligible resources as having a 90-day fuel supply. How should the quantity of a given resource's 90 days of fuel be determined? For example, should each resource be required to have sufficient fuel for 24 hours/day and sustained output at its upper operating limit for the entire 90-day period? Would there be any need for regional differences in this requirement?

PJM Response

For the reasons stated in PJM's response to the question on the Need for Reform, as well as discussed in the body of PJM's comments PJM does not believe there is a basis for the DOE's proposal. That said, the 90-day requirement is arbitrary at best. For instance, recent studies, including the Black Sky/Black Start Protection Initiative, suggest that 30 days of fuel inventory would be required to adequately respond to Black Sky type events.¹⁹ And, even if a resource has 90 days of supply, it does not mean it will be able to operate during extreme weather events where a coal pile freezes or the threat of sustained high winds may cause a nuclear facility to shut down, as discussed above.

¹⁹ See Black Sky/Black Start Protection Initiative which can be found at the following URL:
http://eiscouncil.org/App_Data/Upload/BSPI.pdf

Question 2

Is there a direct correlation between the quantity of on-site fuel and a given level of resilience or reliability? Please provide any pertinent analyses or studies. If there is such a correlation, is 90 days of on-site fuel necessary and sufficient to address outages and adverse events? Or is some other duration more appropriate?

PJM Response

PJM is not aware of any such showing.

C. Fuel Supply Requirement

Question 1

The proposed rule requires that resources must be in compliance with all applicable environmental regulations. How should environmental regulations be considered when determining eligibility? For example, if a unit that was capable of keeping 90-days of fuel on-site was subject to emission limits that would prevent it from running at its upper operating limit for 90 days, should that unit be eligible under this proposed rule?

PJM Response

For the reasons stated in PJM's response to the question on the Need for Reform, as well as discussed in the body of PJM's comments PJM does not believe there is a basis for the DOE's proposal. Nevertheless, environmental restrictions should be taken into account when evaluating the eligibility of a resource to be compensated pursuant to a well-defined resilience reason (which resilience criteria is lacking in the DOE NOPR). Absent the ability for the generator to run for 90-days without being emissions restricted, it would not make sense to guarantee 100% compensation for a unit that is environmentally related.

Question 2

As the proposed rule references the need for resilience due to extreme weather events, including hurricanes, should there be any other eligibility criteria for the resource or fuel supply (e.g., storm hardening)? What considerations should be given to the vulnerability of 90-day fuel supplies to natural or man-made disasters such as extreme cold temperatures, icing, flooding conditions, etc. that may impact the on-site fuel supply?

PJM Response

It is unclear to PJM how the 90-day fuel supply requirement proposed by the DOE will improve resilience during extreme weather events. Recent examples of hurricanes Sandy and Maria have shown that the distribution system as well as the transmission system are limiting factors in maintaining electricity delivery to loads during extreme weather events. PJM believes that shifting the focus to hardening the distribution network and enhancing the planning requirements

of the transmission system to include such severe weather events would have a much more significant impact on the resilience of the power system.

Question 3

Does the vulnerability or non-availability of on-site fuel supplies vary depending upon fuel type, location, region, or other factors?

PJM Response

Fuel type is just one component of a unit's availability in a given situation. One cannot generalize to 'select' one set of fuels over another. Rather, PJM urges consideration of analysis of reliability attributes consistent with PJM's recent analysis.²⁰ Ongoing review of fuel security and generation performance is also important to ensure a resilient system. That analysis was cited approvingly in the DOE August study but seems to have been disregarded for purposes of the DOE proposed NOPR.

III. Implementation

Question 1

How would eligible resources receiving cost of service compensation under the proposed rule be committed and dispatched in the energy market?

PJM Response

Such resources should be required to offer into the energy market at no less than their actual cost. Because such resources would be receiving cost of service compensation, they may have an incentive to offer into the energy market at below their actual cost. Doing so, however, would inappropriately suppress energy market prices, thereby distorting the price signals provided by the market for efficient resource entry and exit.

The DOE NOPR overlooks the fact that even with full cost of service recovery for the existing nuclear and coal fleet, PJM will still need to call on merchant generation in order to meet load in many hours. Yet the DOE subsidy of these units does serious violence to the market signal which the market is intended to send as to the value of all resources. Moreover, it will be harder to attract capital for new merchant generation which still will be needed to meet load, given that investors will flock to the new 'guarantee' created by DOE.

Question 2

How would eligible resources receiving cost based compensation under the proposed rule be considered in the clearing and pricing of centralized capacity markets?

²⁰ Evolving Resource Mix and Reliability Report.

PJM Response

Such resources should be required to offer into centralized capacity markets at no less than their actual going forward costs. Alternatively, resources could offer into these markets at below their going forward costs, if the market operator has adopted a mechanism by which the clearing price determined in those markets can be reconstituted to the competitive price for the purpose of compensating all unsubsidized resources in the market. Not adopting one of these two requirements would result in inappropriate price suppression in the capacity markets that would distort price signals and interfere with the markets' ability to drive efficient resource entry and exit.

However, even with these market safeguards, the distorting impact of the DOE subsidy will discourage investment in the kind of resources that do not meet the DOE-defined eligible class even though they will continue to be needed to meet load demands.

Question 3

What is the expected impact of this proposed rule on entry of new generation, reserve margins, retirement of existing resources, and on resource mix over time?

PJM Response

To the extent these resources are uneconomic and would otherwise retire and exit the market, even with the above protections the rule would have a negative impact on the markets' ability to drive efficient resource entry and exit. The continued operation of uneconomic resources in the market due to the presence of outside-the-market subsidies suppresses clearing prices, erodes investor confidence and stifles the innovation that has made the market successful and resulted in more reliable electric service at the lowest reasonable cost to consumers.

The impact on the reserve margin is dependent on the performance of the resources. To the extent the performance is, on average, worse than the average performance of the PJM fleet, then it will increase the Installed Reserve Margin.

Question 4

Should there be performance requirements for resources receiving compensation under the proposed rule? If so, what should the performance requirement be, and how should it be measured, or tested? What should be the consequence of not meeting the performance requirement?

PJM Response

Yes, the performance requirements on such resources should be identical to the performance requirements applied to all units in the market. Further, and critically, any penalties for non-performance, whether financial or physical, should not be recoverable through the cost-of-service rates envisioned in the rule. Allowing such recovery of performance penalties would

nullify the intended impact of the penalties to drive resource performance that supports system reliability.

Question 5

Should there be any restrictions on alternating between market-based and cost-based compensation?

PJM Response

This should be a one-time choice for any given unit. To allow switching between compensation methods would invite gaming by market participants based upon expectations as to where the greatest revenue could be earned at the expense of load.

IV. Rates

Question 1

The proposed rule lists compensable costs that should be included in the rate as operating and fuel expenses, costs of capital and debt, and a fair return on equity and investment. Are there other costs that would be appropriate to be included in the rate? Would any of the listed costs be inappropriate for inclusion?

PJM Response

PJM does not take a position on this question.

Question 2

Should wholesale market revenues offset any cost of service payments stemming from the proposed rule?

PJM Response

Although clearly wholesale revenues should be offset from cost of service recovery to avoid over-recovery, the distorting impact of this 'true up' for a select set of 'eligible' resources points out the discriminatory and unworkable nature of the DOE proposal.

Question 3

How should RTOs/ISOs allocate the cost of the proposed rule to market participants?

PJM Response

While PJM does not believe that the proposed rule meaningfully improves reliability or resilience, if it is accepted, it will be on the belief that it does. Therefore, if accepted, the costs should be allocated to the expected beneficiaries which would be real-time load and exports. Further, because the proposal is sweeping and requires compensation without regard to the locational value of any eligible resource, an allocation pro-rata across all load and exports would be consistent with the sweeping nature of the proposal itself given that it is difficult to identify specific loads as benefiting more than others from the DOE proposal and allocating costs along traditional “cost causation” grounds.

Question 4

How would the requirement that eligible resources receive full cost recovery be reconciled with the requirement, as stated in the regulatory text, that resources be dispatched during grid operations?

PJM Response

This question points out another inconsistency in the DOE proposal. Units are entitled to receive ‘full cost recovery’ including a return irrespective of whether they actually operate. The only way to reconcile this is to limit recovery to those hours when the units are determined to be needed to meet specific locational or system-wide reliability conditions during emergencies. Of course, this limitation appears inconsistent with the DOE’s proposal making the two difficult to reconcile.

V. Other

Question 1

The proposed requirement for submitting a compliance filing is 15 days after the effective date of any Final Rule in this proceeding, with the tariff changes to take effect 15 days after the compliance filings are due. Please comment on the proposed timing, both to develop a mechanism for implementing the required changes and to implement those changes, including whether or not such changes could be developed and implemented within that timeframe.

PJM Response

PJM incorporates by reference the response of the ISO/RTO Council to this question.

Question 2

Please comment on the proposed rule’s estimated burden of \$291,042 per respondent RTO/ISO, to develop and implement new market rules as proposed, including the potential software upgrades required to do so.

PJM Response

PJM incorporates by reference the response of the ISO/RTO Council to this question.

Question 3

Please describe any alternative approaches that could be taken to accomplish the stated goals of the proposed rule.

PJM Response

Please refer to the body of PJM's comments in section III concerning PJM's review of price formation reforms for the PJM Region.

Question 4

What impact would the proposed rule have on consumers?

PJM Response

Given the lack of details provided in the DOE NOPR, and the extremely short time frame in which to provide comments, PJM has not conducted analyses to provide a meaningful response to this question.

Question 5

The Commission may take notice of relevant public information, including information in other Commission proceedings. If a commenter views information in another Commission proceeding as relevant to the proposed rule, please identify that information and explain how it is relevant to the proposed rule. Such information may include a filing previously submitted by the commenter.

PJM Response

Below is a partial list of public information and Commission proceedings relevant to the proposed rule. Please also refer to the various proceedings and reports referenced throughout the body of PJM's comments.

(1) PJM's October 19, 2017 presentation to the Commission on winterization, which includes information on PJM's resilience-related activities and studies associated with gas-electric coordination, natural gas pipeline modeling and contingencies, cyber security, and potential storm surge impacts, <https://www.ferc.gov/industries/electric/indus-act/rto/10-19-17-A-4-PJM.pdf>. This information is relevant to the proposed rule because it demonstrates the scope and breadth of PJM's resilience-related activities, unrelated to an arbitrary on-site fuel requirement for favored resources.

(2) PJM's report on price formation issues submitted on February 17, 2016 in Docket No. AD14-14-000, *Price Formation in Energy and Ancillary Services Markets in Regional Transmission Organizations and Independent System Operators*, which summarize PJM's price formation issues and activities up to that time. The report is relevant to the proposed rule because it provides information on PJM's price formation efforts to promote resource flexibility and performance, as discussed in these comments.

(3) PJM's Report on Fuel Assurance Activities, submitted on February 18, 2015 in Docket No. AD14-8-000, *Winter 2013-2014 Operations and Market Performance in Regional Transmission Organizations and Independent System Operators*, in which PJM reported on the status of its efforts to address market and system performance issues associated with generator access to sufficient fuel supplies and the firmness of generator fuel arrangements. These fuel assurance activities are relevant to the proposed rule because they represent concrete actions that PJM already has taken to ensure fuel availability during extreme events, such as potential events similar to the Polar Vortex.

(4) The Commission proceedings in Docket Nos. ER15-623 and EL15-29 regarding PJM's Capacity Performance construct, which better ensures that committed capacity resources will perform when called upon to meet the reliability needs of the PJM region. The Capacity Performance construct is relevant to the proposed rule because it demonstrates concrete action that PJM already has taken to ensure resource availability and reliability during extreme events, such as potential events similar to the Polar Vortex.

(5) PJM's post-technical conference comments submitted on May 15, 2014 in Docket No. AD14-8-000, *Winter 2013-2014 Operations and Market Performance in Regional Transmission Organizations and Independent System Operators*, which reference the PJM report entitled *Analysis of Operational Events and Market Impacts during the January 2014 Cold Weather Events*, <http://www.pjm.com/~media/library/reports-notice/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-cold-weather-events.ashx> (May 8, 2014). The comments and report are relevant to the proposed rule because they describe actual extreme events, associated with the Polar Vortex, to which PJM already has responded with concrete action to ensure resource availability and reliability.

APPENDIX B
to
PJM COMMENTS IN RM18-1-000
OCTOBER 23, 2017



October 23, 2017

Mr. Stu Bresler
Senior Vice President Operations & Markets
PJM Interconnection
2750 Monroe Blvd
Audubon, PA 19403

SUBJECT: PJM Price Formation

Dear Mr. Bresler:

I participated with the PJM staff and Board members in the discussion of an important initiative in the evolution of the PJM energy market. PJM staff is proposing to reform the existing pricing model in order to ensure that the incremental cost of serving load is reflected in LMP to the fullest extent possible, uplift is reduced and incentives are maintained. This follows the principles of sound market design. Enhanced energy market price signals will strengthen performance incentives in PJM's markets and is complementary to other reforms being considered by PJM. Given my knowledge of the PJM resource profile, this reform would be an appropriate step forward in price formation for the PJM region.

The market design in PJM follows the basic principles of bid-based, security-constrained, economic dispatch with locational prices. This design is the only approach that is consistent with an efficient energy market under the principles of open-access and non-discrimination. A crucial element of this model is that the prices and related payments support the efficient dispatch. In particular, it serves to achieve the goal that market participants who take prices as given would have no incentive to deviate from the dispatch, and would help make bids and offers consistent with their underlying costs.

The foremost element of this market design is the use of locational marginal prices. Under certain simplifying assumptions, these locational marginal prices provide all that would be needed to support the efficient dispatch. Relying on the locational marginal prices has served the PJM markets well for many years, even though in some circumstances additional payments have been required.

Mr. Stu Bresler
October 23, 2017
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I have discussed with PJM staff the circumstances that deviate from the simplifying assumptions required for locational marginal prices alone to provide full support for efficient operations. Most prominent are conditions where the problem expands to include commitment decisions with start-up costs and associated constraints such as minimum output levels and minimum run-times. Under these conditions, locational marginal prices alone cannot always be guaranteed to support the efficient outcome and additional associated payments are made that must be recovered as part of an “uplift” charge. The additional payments in aggregate equal the foregone profits from following the dispatch. PJM has explained that within the PJM region, its resource profile, flattening price curves and reduced infra-marginal rents have brought the limitations of the locational marginal prices to the forefront and that the PJM market as a whole would benefit from the proposed enhancements for price formation.

The use of locational prices is still indicated, but the choice of these prices has effects on the amount of the uplift. There is an argument for choosing the locational prices, that cover the bulk of the energy revenues, to come as close as possible to minimizing the need for the additional uplift payments. As I have discussed with PJM staff, this ideal case both supports the dispatch and minimizes the uplift.¹ However, this approach presents computational requirements that would be challenging under the best of circumstances, and even more difficult to apply in the short intervals required for the real-time spot market.

A natural approximation to the minimum-uplift model is available in the “integer relaxation,” as PJM intends to propose. This approach employs a pricing model that relaxes the complicating commitment constraints and restores the simplifying assumptions to ensure that the marginal price of the system will not decrease when demand increases. The locational marginal prices from this relaxed model would be easy to obtain. Under certain conditions, the prices from the integer relaxation would be the associated minimum-uplift prices. In general, the integer-relaxation prices should be close to providing the minimum uplift results.

Importantly, the enhanced price formation PJM intends to propose would be compatible with other reforms that are part of the larger discussion in PJM. For example, the enhanced pricing would be extended in practice to deal with multi-period problems where ramp rates and other flexibilities are important. Furthermore, the enhanced pricing model could accommodate improved scarcity pricing which should play a prominent role in adapting to changing market conditions with increasing supplies of intermittent or distributed resources.

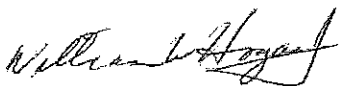
I support the energy pricing method PJM intends to propose. But I do not expect it likely to produce a dramatic change or have as significant an impact as improved scarcity pricing. Currently PJM’s rules for shortage pricing do not accurately value energy and reserves during

¹ This is known as the “minimum uplift” or “convex hull” approach. See (Gribik, Hogan, & Pope, 2007).

Mr. Stu Bresler
October 23, 2017
Page 3

reserve shortages. Based on the current penalty factors, the value of energy and reserves do not approach the estimated value of lost load (VOLL). Additionally, PJM's demand curves do not articulate the reliability value of reserves to the system. To fully address price formation, reforms are required to PJM's shortage pricing approach as well. Nonetheless, PJM's proposal to implement integer relaxation is a beneficial and essential first step toward solving the bigger issue of a more comprehensive enhancement of energy and reserve price formation. And given the circumstances faced by PJM as described above, I am supportive of this approach as a reasonable and appropriate step to be proposed by PJM as a means to address needed price formation reforms in the PJM market.

Very truly yours,



William W. Hogan²
Raymond Plank Professor of Global Energy Policy
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Reference

Gribik, P. R., Hogan, W. W., & Pope, S. L. (2007). Market-Clearing Electricity Prices and Energy Uplift. Retrieved from http://www.hks.harvard.edu/fs/whogan/Gribik_Hogan_Pope_Price_Uplift_123107.pdf

² Note: These comments are those of William Hogan, and do not necessarily represent the views of anyone else. The work has been supported by PJM and FTI Consulting.

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162 FERC ¶ 61,012
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Kevin J. McIntyre, Chairman;
Cheryl A. LaFleur, Neil Chatterjee,
Robert F. Powelson, and Richard Glick.

Grid Reliability and Resilience Pricing

Docket Nos. RM18-1-000

Grid Resilience in Regional Transmission Organizations
and Independent System Operators

AD18-7-000

ORDER TERMINATING RULEMAKING PROCEEDING,
INITIATING NEW PROCEEDING,
AND ESTABLISHING ADDITIONAL PROCEDURES

(Issued January 8, 2018)

1. The Commission previously has taken steps with regard to reliability and other matters that have helped to address the resilience of the bulk power system. The Commission recognizes that we must remain vigilant with respect to resilience challenges, because affordable and reliable electricity is vital to the country's economic and national security. As explained below, we are terminating the proceeding we initiated in Docket No. RM18-1-000 to address the Proposed Rule on Grid Reliability and Resilience Pricing (Proposed Rule) submitted to the Commission by the Secretary of Energy.¹ Nonetheless, we appreciate the Secretary reinforcing the resilience of the bulk power system as an important issue that warrants further attention. To that end, we are initiating a new proceeding in Docket No. AD18-7-000 to specifically evaluate the resilience of the bulk power system in the regions operated by regional transmission organizations (RTO) and independent system operators (ISO). In this order, we direct each RTO and ISO to submit information to the Commission on certain resilience issues and concerns identified herein to enable us to examine holistically the resilience of the bulk power system. The resilience of the bulk power system will remain a priority of this Commission. We expect to review the additional material and promptly decide whether additional Commission action is warranted to address grid resilience.

¹ *Grid Resiliency Pricing Rule*, 82 Fed. Reg. 46,940 (Oct. 10, 2017).

I. Proposed Rule

2. On September 29, 2017, the Secretary submitted the Proposed Rule pursuant to section 403 of the Department of Energy (DOE) Organization Act. The Proposed Rule directed the Commission to consider requiring certain RTOs and ISOs to establish a tariff mechanism providing for: (1) the purchase of energy from an eligible “reliability and resilience resource;” and (2) the recovery of costs and a return on equity for such resources (i.e., a “resilience rate”). The Proposed Rule stated that eligible reliability and resilience resources must be: (1) located in an RTO/ISO with an energy and capacity market; (2) be able to provide essential reliability services;² and (3) have a 90-day fuel supply on-site.
3. As the basis for these requirements, the Proposed Rule cited: (1) significant retirements of baseload generation, particularly coal and nuclear resources; (2) the 2014 Polar Vortex, which the Proposed Rule states exposed problems with the resilience of the grid; and (3) a growing recognition that organized markets do not compensate resources for all of the attributes they contribute to the grid, including resilience.
4. The Secretary directed the Commission to consider and take final action on the Proposed Rule within 60 days of the date of publication in the Federal Register, or, alternatively, to issue the DOE’s proposed rule as an interim final rule immediately, with provision for later modification after consideration of public comments.
5. The Commission initiated Docket No. RM18-1-000 to consider the Proposed Rule. The Commission issued a Notice Inviting Comments on the Proposed Rule on October 2, 2017, with initial comments due on October 23, 2017, and reply comments due on November 7, 2017.³ In addition, on October 4, 2017, the Director of the Commission’s Office of Energy Policy and Innovation issued a request for information seeking responses and comment on a number of specific questions raised by the Proposed Rule.⁴ The Commission received extensive comments and reply comments in response to the Proposed Rule and the Staff Request for Information from a wide variety of interested stakeholders, including utilities, generators, federal and state legislators, state regulatory

² The essential reliability services were to include, but not be limited to: voltage support, frequency services, operating reserves, and reactive power. Proposed Rule at 18.

³ *Grid Reliability and Resilience Pricing*, Notice Inviting Comments (Oct. 2, 2017).

⁴ *Grid Reliability and Resilience Pricing*, Staff Request for Information (Oct. 4, 2017).

agencies and state attorneys general, industrial customers, environmental organizations, mining companies, other industries, and individuals.

6. On December 7, 2017, the Chairman of the Commission proposed to the Secretary of Energy that a 30-day extension be granted to address the Proposed Rule. On December 8, 2017, the Secretary of Energy responded, granting the extension and thereby giving the Commission until January 10, 2018, to address the Proposed Rule.

II. Discussion

A. Background

1. Evolution of the Electric Power Industry

7. To more fully understand the context in which the Proposed Rule was issued and the actions we are taking here, it is important to recount briefly the structural and operational origins and evolution of the electric power industry. Historically, vertically integrated utilities generally built and owned the generation, transmission, and distribution facilities needed to serve load within their respective defined service territories. Utilities constructed generation facilities that they determined were best suited to meet that load. Utility rates were historically regulated by federal and state regulators on a cost-of-service basis; the utilities charged for electric generation at rates calculated to compensate them for their actual costs plus a fair rate of return. In other words, during this early period, there was no market structure as we understand it in today's electric power industry.⁵

8. Beginning in the 1970s, statutory and regulatory developments at the federal and state level encouraged the development of competitive electricity markets, including encouraging the growth of non-utility generators.⁶ In 1996, this Commission issued its

⁵ The Commission's Order No. 888, discussed below, recounts the historical landscape following enactment of the Federal Power Act (FPA) in 1935. *See Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, FERC Stats. & Regs. ¶ 31,036, at 31,639-31,645 (1996).

⁶ For instance, the Public Utility Regulatory Policies Act of 1978 and the Energy Policy Act of 1992 helped spur competition in the electric power industry. Additionally, the Commission began authorizing entities to make electric power sales at market-based rates starting in the late 1980s. The market-based rate program continues to be a critical part of the Commission's electric regulatory responsibilities.

landmark Order No. 888,⁷ which required public utility transmission providers to provide open access transmission service and developed principles for the concept of ISOs and RTOs, and in 1999 the Commission issued Order No. 2000,⁸ which expressly encouraged the development of such regional entities with the intent of using such entities to foster competitive power markets. Meanwhile, starting in the 1990s, a number of states restructured their retail electricity markets to allow for more competition in the generation sector, which further contributed to development of bulk power markets and increased reliance on independent regional bodies for operation of the grid.

9. The traditional vertically integrated model was significantly affected by these developments, particularly in regions of the country where RTOs and ISOs manage the transmission grid. Notably, subject to Commission approval, RTOs/ISOs have developed organized markets for electric energy and ancillary services, and a number of them have also established centralized capacity markets. Thus, for more than two decades now, support for markets and market-based solutions has been a core tenet of Commission policy. A result of this approach has been that in regions with organized markets, the Commission has largely adopted a pro-market regulatory model, wherein the Commission relies on competition in approving market rules and procedures that, in turn, determine the prices for the energy, ancillary services, and capacity products (where applicable). Under this pro-competition, market-driven system, owners of generating facilities that are unable to remain economic in the market may take steps to retire or mothball their facilities.

10. A continually evolving phenomenon that has affected the development and evolution of electric markets is innovation in the energy sector and the change in the energy resource mix. As part of its ongoing oversight of wholesale electric markets, the Commission continues to evaluate its current rules and has issued several orders to ensure that our rates in our markets remain just and reasonable and not unduly discriminatory or

⁷ *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, FERC Stats. & Regs. ¶ 31,036 (1996), *order on reh'g*, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048, *order on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh'g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd in relevant part sub nom. Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff'd sub nom. New York v. FERC*, 535 U.S. 1 (2002).

⁸ *Regional Transmission Organizations*, Order No. 2000, FERC Stats. & Regs. ¶ 31,089 (1999), *order on reh'g*, Order No. 2000-A, FERC Stats. & Regs. ¶ 31,092 (2000), *aff'd sub nom. Pub. Util. Dist. No. 1 v. FERC*, 272 F.3d 607 (D.C. Cir. 2001).

preferential. For example, the Commission has acted to remove barriers to the integration and participation of variable energy⁹ and demand response resources,¹⁰ as well as revising or expanding compensation opportunities for various grid services, such as frequency regulation.¹¹

11. The Commission's support of competitive wholesale electricity markets has been grounded in the substantial and well-documented economic benefits that these markets provide to consumers. In Order No. 890, for example, the Commission cited a DOE study that found that competition had reduced consumers' bills by billions of dollars a year, even as it found that additional savings could be achieved by removing congestion bottlenecks.¹² In Order No. 719, the Commission explained that effective wholesale competition protects consumers by "providing more supply options, encouraging new entry and innovation, spurring deployment of new technologies, promoting demand response and energy efficiency, improving operating performance, exerting downward pressure on costs, and shifting risk away from consumers."¹³ At the same time, however, the Commission has continued to ensure that reliability is at the forefront of its responsibilities. The Commission's endorsement of markets does not conflict with its oversight of reliability, and the Commission has been able to focus on both without compromising its commitment to either.¹⁴

⁹ *Integration of Variable Energy Resources*, Order No. 764, FERC Stats. & Regs. ¶ 31,331 (cross-referenced at 139 FERC ¶ 61,246) (2012).

¹⁰ *Demand Response Compensation in Organized Wholesale Energy Markets*, Order No. 745, FERC Stats. & Regs. 31,322 (cross-referenced at 134 FERC ¶ 61,187) (2011).

¹¹ *Frequency Regulation Compensation in the Organized Wholesale Power Markets*, Order No. 755, FERC Stats. & Regs. 31,324 (cross-referenced at 137 FERC ¶ 61,064) (2011).

¹² *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, FERC Stats. & Regs. ¶ 31,241, at P 60 (2007) (citing DOE, National Transmission Grid Study (May 2002)).

¹³ *Wholesale Competition in Regions with Organized Electric Markets*, Order No. 719, FERC Stats. & Regs. ¶ 31,281, at P 1 (2008).

¹⁴ For example, the Commission has held that out-of-market actions may be warranted in certain instances to address demonstrated reliability concerns. The Commission has approved these actions, however, on a limited basis, only as a last resort, and only after there has been a specific showing of an immediate reliability need. *See*,

2. The Commission's Efforts to Help Ensure Bulk Power System Resilience

12. The Commission has taken action to address reliability and other issues with regard to the bulk power system that have helped with the bulk power system's resilience, even though we may not have used that particular term. For example, in response to the increasing use of natural gas for electric generation, the Commission conducted a multi-year effort to evaluate the coordination of wholesale natural gas and electricity market scheduling, resulting in significant improvements to those scheduling and coordination processes.¹⁵ The Commission has also specifically examined the grid's response to the events of the 2014 Polar Vortex,¹⁶ and how each RTO/ISO addresses fuel assurance.¹⁷ Critically, the Commission has also approved significant capacity market reforms in ISO New England, Inc. (ISO-NE) and PJM Interconnection, L.L.C. (PJM) that are designed to bolster performance from capacity resources and to help address fuel supply issues during periods of system stress.¹⁸ Those market reforms created financial

e.g., New York Independent System Operator, Inc., 150 FERC ¶ 61,116, at P 11 (2015) (“This last requirement reflects our belief that RMR filings should be made only to temporarily address the need to retain certain generation until more permanent solutions are in place and that all alternatives should be considered to ensure that designating a generator for RMR service is a last resort option for meeting immediate reliability needs”). *See also Cal Indep. Sys. Operator Corp.*, 87 FERC ¶ 61,250, at 61,968 (1999) (approving partial settlement concerning RMR agreements and stating that the Commission “in its promotion of efficient competitive markets, wishes to ensure that RMR operations under the settlement do not result in any unforeseen market distortions.”).

¹⁵ *See Coordination of the Scheduling Processes of Interstate Natural Gas Pipelines and Public Utilities*, Order No. 809, FERC Stats. & Regs. ¶31,368 (cross-referenced at 151 FERC ¶ 61,049) (2015).

¹⁶ *Centralized Capacity Markets in Regional Transmission Organizations and Independent System Operators*, 149 FERC ¶ 61,145 (2014) (order addressing technical conferences on, among other things, the 2014 Polar Vortex).

¹⁷ *Id.*

¹⁸ *See ISO New England Inc. and New England Power Pool*, 147 FERC ¶ 61,172 (2014), *reh'g denied*, 153 FERC ¶ 61,223 (2015), *appeal pending sub nom. New England Power Generators Ass'n v. FERC*, No. 16-1023 (D.C. Cir. filed Jan. 19, 2016). *See also*

incentives to enhance reliability during extreme operating conditions. While none of the Commission's efforts described above were specifically targeted at "resilience" by name, they were directed at elements of resilience, in that they sought to ensure the uninterrupted supply of electricity in the face of fuel disruptions or extreme weather threats. Further, the Commission has conducted significant work to address bulk power system reliability through the North American Electric Reliability Corporation (NERC) reliability standards, including its continued work on Critical Infrastructure Protection standards to protect the system against cybersecurity and physical security threats,¹⁹ as well as geomagnetic disturbances.²⁰

13. Notwithstanding these and other Commission efforts to address the resilience of the bulk power system, we conclude that resilience remains an important issue that warrants the Commission's continued attention, including through the development of a clear understanding of what each RTO/ISO currently does with respect to the assurance or strengthening of resilience and what more the RTOs/ISOs and the Commission could be doing on this issue. Accordingly, although we terminate the Proposed Rule proceeding as discussed below, we are not ending our work on the issue of resilience. To the contrary, we are initiating a new proceeding to address resilience in a broader context and are directing the RTOs/ISOs to provide information – followed by an opportunity for comment by any other interested entity – that will inform us as to whether additional actions by the Commission and the ISOs/RTOs are warranted with regard to resilience issues.

PJM Interconnection, L.L.C., 151 FERC ¶ 61,208 (2015), *reh'g denied*, 155 FERC ¶ 61,157 (2016), *aff'd sub nom. Advanced Energy Mgmt. All. v. FERC*, 860 F.3d 656 (D.C. Cir. 2017).

¹⁹ See *Physical Security Reliability Standard*, Order No. 802, 149 FERC ¶ 61,140 (2014); *Revised Critical Infrastructure Protection Reliability Standards*, Order No. 822, 154 FERC ¶ 61,037 (2016), *reh'g denied*, Order No. 822-A, 156 FERC ¶ 61,052 (2016); *Revised Critical Infrastructure Protection Reliability Standards*, Order No. 829, 156 FERC ¶ 61,050 (2016); *Cyber Systems in Control Centers*, Notice of Inquiry, FERC Stats. & Regs. ¶ 35,557 (2016); *Revised Critical Infrastructure Protection Reliability Standards CIP-003-7 – Cyber Security – Security Management Controls*, Notice of Proposed Rulemaking, 161 FERC ¶ 61,047 (2017).

²⁰ See *Reliability Standard for Transmission System Planned Performance for Geomagnetic Disturbance Events*, Order No. 830, 156 FERC ¶ 61,215 (2016).

B. Termination of Docket No. RM18-1-000

14. Having considered the Proposed Rule and the comments received in Docket No. RM18-1-000, we terminate the proceeding in Docket No. RM18-1-000. The FPA is clear: in order to require RTOs/ISOs to implement tariff changes as contemplated by the Proposed Rule, there must be a demonstration that the specific statutory standards of section 206 of the FPA are satisfied. Thus, there must first be a showing that the existing RTO/ISO tariffs are unjust, unreasonable, unduly discriminatory or preferential.²¹ Then, any remedy proposed under FPA section 206 must be shown to be just, reasonable, and not unduly discriminatory or preferential.²² For the reasons discussed below, the Proposed Rule did not satisfy those clear and fundamental legal requirements under section 206 of the FPA. Given those legal requirements, we have no choice but to terminate Docket No. RM18-1-000.

15. Neither the Proposed Rule nor the record in this proceeding has satisfied the threshold statutory requirement of demonstrating that the RTO/ISO tariffs are unjust and unreasonable. While some commenters allege grid resilience or reliability issues due to potential retirements of particular resources,²³ we find that these assertions do not demonstrate the unjustness or unreasonableness of the existing RTO/ISO tariffs. In addition, the extensive comments submitted by the RTOs/ISOs do not point to any past or planned generator retirements that may be a threat to grid resilience.²⁴ We also disagree

²¹ 16 U.S.C. § 824e(a) (2012). *See also, e.g., Emera Maine v. FERC*, 854 F.3d 9, 25 (D.C. Cir. 2017) (“Without a showing that the existing rate is unlawful, FERC has no authority to impose a new rate.”); *FirstEnergy Serv. Co. v. FERC*, 758 F.3d 346, 353 (D.C. Cir. 2014) (“Regardless of whether it is charged with completing step two, proposing new just and reasonable rates, [petitioner] still must complete step one, demonstrating that PJM’s existing rates are unjust and unreasonable.”).

²² 16 U.S.C. § 824e(a) (2012).

²³ *See, e.g.,* PSEG Companies Initial Comments at 5-6; Exelon Corporation Initial Comments at 1, 25-26; FirstEnergy Service Company and its named affiliates (FirstEnergy) Initial Comments at 32-34.

²⁴ *See* New York Independent System Operator, Inc. Initial Comments at 4-5; PJM Initial Comments at 15; ISO-NE Initial Comments at 1-3; Midcontinent Independent System Operator, Inc. (MISO) Initial Comments at 5-11.

Docket Nos. RM18-1-000 and AD18-7-000

with assertions that an adequate record exists through the Commission's price formation efforts to support the Proposed Rule's action regarding bulk power system resilience.²⁵

16. Turning to the second prong of the section 206 analysis, we note that the Proposed Rule would allow all eligible resources to receive a cost-of-service rate regardless of need or cost to the system.²⁶ The record, however, does not demonstrate that such an outcome would be just and reasonable.²⁷ It also has not been shown that the remedy in the Proposed Rule would not be unduly discriminatory or preferential.²⁸ For example, the Proposed Rule's on-site 90-day fuel supply requirement would appear to permit only

²⁵ The goals of the price formation proceeding center largely on facilitating competition and ensuring that market prices reflect the marginal cost of production so that prices accurately reflect system conditions and operational constraints. *See Price Formation in Energy and Ancillary Services Markets Operated by Regional Transmission Organizations and Independent System Operators*, Notice Inviting Post-Technical Workshop Comments, Docket No. AD14-14-000, at 1 (Jan. 16, 2015) (Notice Inviting Comments); *Price Formation in Energy and Ancillary Services Markets Operated by Regional Transmission Organizations and Independent System Operators*, Notice, Docket No. AD14-14-000 (June 19, 2014) (Price Formation Notice). Thus, that proceeding does not include even an attempted nexus to bulk power system resilience, whereas in the Proposed Rule and in the proceeding we are newly establishing here, the resilience of the bulk power system is the principal focus. In addition, there is no evidence in other Commission proceedings indicating that any RTO/ISO tariffs are unjust and unreasonable because they do not adequately account for resilience.

²⁶ As noted above, the Commission typically has approved as just and reasonable cost-of-service rates through out-of-market arrangements in very limited circumstances and when there is a demonstrated reliability need. *See* note 14, *supra*.

²⁷ For example, the Proposed Rule proposes that RTOs/ISOs pay a cost-of-service rate to a resource that has a 90-day fuel supply on site to enable it to operate during an emergency, extreme weather conditions, or a natural or man-made disaster. However, neither the Proposed Rule nor the record demonstrate why the existence of an on-site 90-day fuel supply is a reasonable basis to find that rate to be just and reasonable and not unduly discriminatory or preferential. In addition, the Proposed Rule does not address the concern that an eligible resource located in a constrained area may not assist with the resilience of the bulk power system to warrant that rate.

²⁸ To be clear, notwithstanding our ruling under section 206 with regard to the Proposed Rule, if an RTO/ISO were to identify a specific threat to the resilience of its system, we would promptly consider an appropriate proposal from the RTO/ISO to address the issue.

certain resources to be eligible for the rate, thereby excluding other resources that may have resilience attributes.

C. Initiating a New Proceeding and Establishing Additional Procedures on Resilience

17. Even though we are terminating Docket No. RM18-1-000, the Commission concluded that it must remain vigilant with respect to resilience challenges. Although the Proposed Rule failed to satisfy the fundamental legal requirements of section 206 of the FPA, the Proposed Rule and the record developed to date have shed additional light on resilience more generally and on the need for further examination by the Commission and market participants of the risks that the bulk power system faces and possible ways to address those risks in the changing electric markets. As the DOE Grid Study documented, we have seen a variety of economic, environmental, and policy drivers that are changing the way electricity is procured and used.²⁹ These changes present new opportunities and challenges regarding the reliability, affordability, and environmental profile of each region's electric system. These changes may impact the resilience of the bulk power system. As we navigate these changes, the Commission's markets, transmission planning rules, and reliability standards should evolve as needed to address the bulk power system's continued reliability and resilience.³⁰

18. Therefore, we are initiating a new proceeding, Docket No. AD18-7-000, to take additional steps to explore resilience issues in the RTOs/ISOs. The goal of this proceeding is: (1) to develop a common understanding among the Commission, industry, and others of what resilience of the bulk power system means and requires; (2) to understand how each RTO and ISO assesses resilience in its geographic footprint; and (3) to use this information to evaluate whether additional Commission action regarding resilience is appropriate at this time. This examination of the resilience of the bulk power system will be a priority of the Commission. Therefore, as described below, we direct each RTO and ISO to submit specific information regarding the resilience of its respective region within 60 days.

²⁹ *Staff Report to the Secretary on Electricity Markets and Reliability*, United States Department of Energy (Aug. 2017), available at https://energy.gov/sites/prod/files/2017/08/f36/Staff%20Report%20on%20Electricity%20Markets%20and%20Reliability_0.pdf.

³⁰ On December 14, 2017, NERC issued its 2017 Long-term Reliability Assessment. That assessment reinforces the continuing need for the Commission to be vigilant and to make the resilience of the bulk power system a priority of the Commission.

19. We recognize that the RTOs/ISOs are well-suited to understand the needs of their respective regions and initially assess how to address resilience given their individual geographic needs. Although the Proposed Rule focuses on one possible aspect of grid resilience – secure onsite fuel – we conclude that a proper evaluation of grid resilience should not be limited to that single issue, and should instead encompass a broader consideration of resilience issues, including wholesale electric market rules, planning and coordination, and NERC standards. Indeed, the efforts of RTOs and ISOs on grid resilience encompass a range of activities, including wholesale electric market design, transmission planning, mandatory reliability standards, emergency action plan development, inventory management, and routine system maintenance. However, many of these activities are not unique to RTOs/ISOs and are performed by transmission providers in areas that do not have centralized wholesale electricity markets. Similarly, NERC and the regional entities tasked with implementation of mandatory reliability standards have a critical role to play in this area. Although hearing from the RTOs/ISOs on this topic is an appropriate place to begin, we will provide interested entities an opportunity to submit reply comments on the RTO/ISO submissions within 30 days of the due date of those submissions.³¹

20. We anticipate that the RTO/ISO submissions will explain how they currently address resilience of the bulk power system within their footprints, and will highlight any specific or unique resilience challenges faced by the regions. The submissions also will give the RTOs/ISOs the opportunity to discuss potential paths forward for addressing any identified gaps or exposure on the resilience of the bulk power system.

1. A Common Understanding of Resilience

21. In order to appropriately study the resilience of the bulk power system in the RTO/ISO regions, we think it is appropriate to first achieve a common understanding of what resilience is in the context of the bulk power system.

³¹ Our focus on the RTOs/ISOs should not be understood to mean that we believe that those systems are less resilient than non-RTO/ISO regions. Rather, we conclude that a targeted proceeding focused on those regions is a prudent next step in our consideration of resilience of the bulk power system. We also note that the concept of resilience necessarily involves issues, topics, and questions that extend beyond the Commission's jurisdiction, such as distribution system reliability and modernization. The Commission encourages RTOs/ISOs and other interested entities to engage with state regulators and other stakeholders through Regional State Committees or other venues to address resilience at the distribution level.

22. According to comments on the Proposed Rule, there seems to be a general consensus that grid reliability and grid resilience are related but separate concepts, with the elements of grid reliability being better understood and defined. It also is evident that there is currently no uniform definition of resilience used across the electric industry. For example, the Proposed Rule states that certain natural and man-made disasters threaten the resilience of the grid, but does not set forth a clear definition for resilience. Commenters have cited various definitions of resilience, including from the National Infrastructure Advisory Council,³² the National Academy of Sciences,³³ Argonne National Laboratory,³⁴ PJM,³⁵ and Presidential Policy Directive 21.³⁶ The Commission notes that commenters generally defined resilience similarly (i.e., as the ability of the bulk power system to withstand or recover from disruptive events).³⁷

23. To help guide consideration of issues related to resilience of the bulk power system, the Commission understands resilience to mean:

³² National Infrastructure Advisory Council, *A Framework for Establishing Critical Infrastructure Resilience Goals: Final Report and Recommendations by the Council* at 15 (Oct. 2010).

³³ National Academy of Sciences, *Enhancing the Resilience of the Nation's Electricity System*, Washington, DC: National Academies Press (Sept. 2017), available at <https://www.nap.edu/catalog/24836/enhancing-the-resilience-of-the-nations-electricity-system>.

³⁴ Department of Energy, Argonne National Laboratory, *Front-Line Resilience Perspectives: The Electric Grid*, Executive Summary at xiii (Nov. 2016), available at <https://energy.gov/sites/prod/files/2017/01/f34/Front-Line%20Resilience%20Perspectives%20The%20Electric%20Grid.pdf>.

³⁵ PJM Interconnection, L.L.C., *PJM's Evolving Resource Mix and System Reliability* n.16 (March 30, 2017), available at <http://www.pjm.com/~media/library/reports-notice/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx>.

³⁶ Michael Moore, Independent Consultant, Comments at 2; Nuclear Energy Institute Comments at 19 (citing Nat'l Archives, Archived Obama White House Website, Presidential Policy Directive 21: Critical Infrastructure Security and Resilience (PPD-21) (Feb. 12, 2013)).

³⁷ See, e.g., Comments of Utility Workers Union of America, AFL-CIO (UWUA) at 5-6 (citing *PJM's Evolving Resource Mix and System Reliability*); FirstEnergy Initial Comments at 17.

The ability to withstand and reduce the magnitude and/or duration of disruptive events, which includes the capability to anticipate, absorb, adapt to, and/or rapidly recover from such an event.³⁸

We seek comment from the RTOs and ISOs on our understanding of resilience as described above. We also ask for comments on whether any of the terms used above require further elaboration to ensure a common understanding (e.g., identification of the particular types of disruptive events).

24. Resilience could encompass a range of attributes, characteristics, and services that allow the grid to withstand, adapt to, and recover from both naturally occurring and man-made disruptive events. At the most basic level, ensuring resilience requires that we both (1) determine which risks to the grid we are going to protect against, and (2) identify the steps, if any, needed to ensure those risks are addressed.

2. How RTOs/ISOs Assess Threats to Resilience

25. Next, the Commission seeks comment on how each RTO/ISO currently evaluates the resilience of its system. The Commission recognizes regional differences among the RTOs/ISOs, and appreciates that those differences likely impact how each RTO/ISO approaches resilience in its region. The Commission directs the RTOs/ISOs to address the following questions on this issue and, as needed, to highlight any unique resilience challenges that exist in their respective regions.³⁹

(a) What are the primary risks to resilience in your region from both naturally occurring and man-made threats? How do you identify them? Are they short-, mid-, or long-term challenges?

(b) How do you assess the impact and likelihood of resilience risks?

(c) Please explain how you identify and plan for risks associated with high-impact, low-frequency events (e.g., physical and cyber attacks, accidents, extended fuel supply disruptions, or extreme weather events). Please discuss the challenges you face in trying to assess the impact and likelihood of high-impact, low-frequency risks. In addition, please describe what additional information, if any, would be helpful in assessing the impact and likelihood of such risks.

³⁸ Generally based on the National Infrastructure Advisory Council's *Critical Infrastructure Resilience Final Report and Recommendations* at 8 (Sept. 8, 2009).

³⁹ The RTOs/ISOs should not include Critical Energy/Electric Infrastructure Information (CEII) in their submissions.

(d) Should each RTO/ISO be required to identify resilience needs by assessing its portfolio of resources against contingencies that could result in the loss or unavailability of key infrastructure and systems? For example, should RTOs/ISOs identify as a resilience threat the potential for multiple outages that are correlated with each other, such as if a group of generators share a common mode of failure (e.g., a correlated generator outage event, such as a wide-scale disruption to fuel supply that could result in outages of a greater number of generating facilities)? The RTOs/ISOs should also discuss resilience threats other than through a correlated outage approach. Do RTOs/ISOs currently consider these types of possibilities, and if so, how is this information used?

(e) Identify any studies that have been conducted, are currently in progress, or are planned to be performed in the future to identify the ability of the bulk power system to withstand a high-impact, low-frequency event (e.g., physical and cyber-attacks, accidents, extended fuel supply disruptions, or extreme weather events). Please describe whether any such studies are conducted as part of a periodic review process or conducted on an as-needed basis.⁴⁰

(f) In these studies, what specific events and contingencies are selected, modeled, and assessed? How are these events and contingencies selected?

(g) What criteria (e.g., load loss (MW)), duration of load loss, vulnerability of generator outages, duration of generator outages, etc.) are used in these studies to determine if the bulk power system will reasonably be able to withstand a high-impact, low-frequency event? Are the studies based on probabilistic analyses or deterministic analyses?

(h) Do any studies that you have conducted indicate whether the bulk power system is able to reasonably withstand a high-impact, low frequency event? If so, please describe any actions you have taken or are planning as mitigation, and whether additional actions are needed.

(i) How do you determine whether the threats from severe disturbances, such as those from low probability, high impact events require mitigation? Please describe any approaches or criteria you currently use or otherwise believe are useful in determining whether certain threats require mitigation.

⁴⁰ The Commission is not directing that these studies be included in the RTO/ISO submissions filed in response to this order. Instead, the RTOs/ISOs are required to identify and describe such studies in their submissions.

- (j) How do you evaluate whether further steps are needed to ensure that the system is capable of withstanding or reducing the magnitude of these high-impact, low frequency events?
- (k) What attributes of the bulk power system contribute to resilience? How do you evaluate whether specific components of the bulk power system contribute to system resilience? What component-level characteristic, such as useful life or emergency ratings, support resilience at the system level?
- (l) If applicable, how do you determine the quantity and type of bulk power system physical asset attributes needed to support resilience? Please include, if applicable, what engineering and design requirements, and equipment standards you currently have in place to support resilience? Are those engineering and design requirements designed to address high-impact, low-frequency events? Do these requirements change by location or other factors?
- (m) To what extent do you consider whether specific challenges to resilience, such as extreme weather, drought, and physical or cyber threats, affect various generation technologies differently? If applicable, please explain how the different generation technologies used in your system perform in the face of these challenges.
- (n) To what extent are the challenges to the resilience of the bulk power system associated with the transmission system or distribution systems, rather than electric generation, and what could be done to further protect the transmission system from these challenges?
- (o) Over what time horizon should the resilience assessments discussed above be conducted, and how frequently should RTOs/ISOs conduct such an analysis? How could these studies inform planning or operations?
- (p) How do you coordinate with other RTOs/ISOs, Planning Coordinators, and other relevant stakeholders to identify potential resilience threats and mitigation needs?
- (q) Are there obstacles to obtaining the information necessary to assess threats to resilience? Is there a role for the Commission in addressing those obstacles?
- (r) Have you performed after-the-fact analyses of any high-impact, low-frequency events experienced in the past on your system? If so, please describe any recommendations in your analyses and whether they have or have not been implemented.

- (s) Please provide any other information that you believe the Commission would find helpful in its evaluation of the resilience of the RTO/ISO systems.

3. **How RTOs/ISOs Mitigate Threats to Resilience**

26. Once an RTO/ISO identifies a particular need or threat to resilience, there could be various ways to mitigate such risk. For example, RTO and ISO resource adequacy programs require reserve margins necessary to ensure adequate generation capacity to meet peak load conditions throughout the year. Further, RTO and ISO day-ahead and real-time markets generally secure and operate the transmission system assuming the loss of the largest vulnerable element at any given time. RTOs/ISOs may take additional actions to address concerns beyond the largest vulnerable element, such as procuring additional operating reserves. In 2014, for example, PJM implemented shortage pricing for operating reserves procured to respond to risks that could reasonably materialize and for which PJM's normal reserve procurement processes would not otherwise account.⁴¹ Further, all RTOs/ISOs have a residual unit commitment process to address regionally identified reliability considerations.⁴² Finally, resources that provide ancillary services, such as those with black-start capability, help ensure recovery from power-loss events without the need for auxiliary power from the grid.

27. In the submissions, we seek comment on how RTOs/ISOs evaluate options to mitigate any risks to grid resilience. We direct the RTOs/ISOs to answer the following questions on this topic:

- (a) Describe any existing operational policies or procedures you have in place to address specific identified threats to bulk power system resilience within your region. Identify each resilience threat (e.g., the potential for correlated generator outage events) and any operational policies and procedures to address the threat. Describe how these policies or procedures were developed in order to ensure their effectiveness in mitigating the identified risks and also describe any historical circumstances where you implemented these policies or procedures.
- (b) How do existing market-based mechanisms (e.g., capacity markets, scarcity pricing, or ancillary services) currently address these risks and support resilience?

⁴¹ *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,017 (2014).

⁴² *Staff Analysis of Operator-Initiated Commitments in RTO and ISO Markets*, Docket No. AD14-14-000 at 10-14 (Dec. 2014), available at <https://www.ferc.gov/legal/staff-reports/2014/AD14-14-operator-actions.pdf>.

(c) Are there other generation or transmission services that support resilience? If yes, please describe the service, how it supports resilience, and how it is procured.

(d) How do existing operating procedures, reliability standards (e.g., N-1 NERC TPL contingencies), and RTO/ISO planning processes (e.g., resource adequacy programs or regional transmission planning) currently consider and address resilience?

(e) Are there any market-based constructs, operating procedures, NERC reliability standards, or planning processes that should be modified to better address resilience? If so, please describe the potential modifications.

D. Conclusion

28. Promoting the resilience of the bulk power system is an important issue for the Commission. Each RTO/ISO should take a proactive stance on addressing and ensuring resilience. We are encouraged by efforts underway in PJM⁴³ and ISO-NE⁴⁴ to better understand vulnerabilities in their systems, and support similar efforts in other regions where analyses of potential resilience issues could be helpful. We also are encouraged by the ongoing work in MISO⁴⁵ to develop a long-term plan to address changing system needs in light of an evolving resource mix. At the heart of each of these initiatives is collaboration between RTOs/ISOs and their stakeholders, and we look forward to receiving stakeholder input on the submissions. As noted above, the topic of the new proceeding - resilience of the bulk power system - will remain a priority of the Commission and we expect to review the additional material and promptly decide whether additional Commission action on this issue is warranted.

⁴³ See *PJM's Evolving Resource Mix and System Reliability* *supra* note 35.

⁴⁴ See ISO-NE Initial Comments at 7 (“[T]he ISO has an upcoming process planned to quantify risks related to fuel security.”).

⁴⁵ See MISO Initial Comments at 8 (“MISO values discrete reliability attributes for generation resources through proven market-based mechanisms and continues to work with stakeholders on further market-based reliability improvements. Through its Market Roadmap, MISO is exploring several such initiatives...”).

The Commission orders:

(A) The RTOs/ISOs are hereby directed to provide responses to the Commission, as discussed in the body of this order, within 60 days of the date of this order. Interested entities may submit reply comments within 30 days of the due date of the RTO/ISO submissions.

(B) The proceeding in Docket No. RM18-1-000 is hereby terminated, as discussed in the body of this order.

By the Commission. Commissioners LaFleur, Chatterjee, and Glick are concurring with separate statements attached.

(S E A L)

Kimberly D. Bose,
Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Grid Reliability and Resilience Pricing

Docket Nos. RM18-1-000

Grid Resilience in Regional Transmission Organizations
and Independent System Operators

AD18-7-000

(Issued January 8, 2018)

LaFLEUR, Commissioner *concurring*:

Since I have been at the Commission, the reliability of the nation's electric system in serving customers has been my top priority. In my view, resilience — the ability to withstand or recover from disruptive events and keep serving customers — is unquestionably an element of reliability. Indeed, I believe it has already informed much of the Commission's work on both market rules and reliability standards.¹ As part of our continued work in this area, I support the Commission's action today to start a focused proceeding to explore how the RTOs/ISOs address the resilience of the grid in their respective regions, and whether there are additional steps the Commission should take to support resilience.

I also strongly support the decision not to adopt the rule proposed by the Secretary of Energy.² As explained below, as well as in Commissioner Glick's separate statement, I do not think the record demonstrates the need for the Proposed Rule to support resilience. Further, even had a resilience issue been demonstrated, I have serious concerns about the nature of the proposed remedy, which would address the issue not through market rules but through out-of-market payments to certain designated resources.

I write separately to expand on the larger context surrounding the issues in this docket, and how I believe the Commission should approach them going forward.

While the challenge of providing reliable energy is constant, the nature of the challenge has necessarily changed as the resources, infrastructure, and commercial and regulatory structures relied upon to meet that challenge have evolved. Even before the harnessing of electricity, the history of energy in this country has been one of continual

¹ See *Grid Reliability and Resilience Pricing*, 162 FERC ¶ 61,012, at P 12 (2018).

² Proposed Rule on Grid Reliability and Resilience Pricing, Docket No. RM18-1-000 (2017) (Proposed Rule). The full text of the Proposed Rule can be found at: <https://energy.gov/downloads/notice-proposed-rulemaking-grid-resiliency-pricing-rule>.

change and progress. We have moved from reliance on wood and local waterworks in the 19th century to the development of coal-fired steam generators and large-scale hydro in the first half of the 20th century. The mid-20th century saw the commercialization of nuclear generation, followed later in the century by the large-scale introduction of combined cycle gas generation and early-stage non-hydro renewables.

None of these changes in where the nation gets its energy were driven by this Commission or its predecessors. However, the Commission has played a role in adapting to technological change, ensuring that rates remained just and reasonable and customers were served reliably through successive generations and technological changes. Thus, in the late 20th century, responding to customer demands for access to new technologies and new generation choices, FERC oversaw the introduction of competitive wholesale power markets, which have continued to spread over the past 20 years to cover more than two-thirds of the nation's population. I am a strong supporter of competitive markets, which benefit customers by reducing costs, improving efficiency and innovation, and strengthening reliability by deploying resources over a broader footprint.

In the 21st century, against the backdrop of wholesale markets, the pace of technological change in energy has accelerated, resulting in a rapid transformation of the nation's resource mix. This has been driven by (1) the growth in the availability and affordability of domestic natural gas and its increased use for electric generation, (2) the rapid development and deployment of wind, solar, storage, and demand-side technologies, both central and distributed, and (3) a changing understanding of the environmental consequences of energy use, especially climate change, driving state and federal policy and customer choices.

With these new technologies have come changes in the location and operation of energy resources, their cost patterns, and the way grid operators plan their systems and deploy resources to keep the lights on. As with all transitions, there have been market winners and losers as new technologies have brought competitive pressures to bear on existing resources. Resource turnover is a natural consequence of markets, and the reduced prices that result from greater competition are a benefit to customers, not a problem to solve, unless reliability is compromised. Keeping up with these changes by ensuring that market tariffs and reliability standards sustain both reliability and just and reasonable rates in a time of changing resources has been a major focus of the Commission, and must continue to be.

As the recent Department of Energy grid study³ and numerous analyses by

³ *Staff Report to the Secretary on Electricity Markets and Reliability*, United States Department of Energy (August 2017), available at <https://energy.gov/sites/prod/files/2017/08/f36/Staff%20Report%20on%20Electricity%20>

NERC⁴ have noted, the transformation of the resource mix to date has been accomplished without compromising reliability.⁵ However, ensuring that this continues to be the case requires continued diligence, and the inquiry we begin in this docket will support that ongoing effort.

Where the Commission has seen evidence of the need for greater system resilience in a changing resource mix, it has acted to ensure that such resilience was provided. It has generally done so by overseeing changes to market design (defining needed resource performance, and using competition to obtain it),⁶ interconnection agreements or other tariffs (requiring that certain essential reliability services be provided),⁷ or mandatory reliability standards.⁸ In each case, the Commission has recognized a customer need,

0Markets%20and%20Reliability 0.pdf.

⁴ *E.g.*, 2017 Long-term Reliability Assessment, North American Electric Reliability Corporation (December 2017), available at http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_12132017_Final.pdf.

⁵ Indeed, as Commissioner Glick correctly notes in his concurrence, new resource additions have in some ways strengthened the resilience of the power system. For example, notwithstanding alleged concerns by some about the loss of fuel diversity, the resource mix in many regions of the country (such as that served by PJM Interconnection, L.L.C.) is more diverse than ever before as new technologies and resources are introduced.

⁶ *E.g.*, *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208 (2015), *reh'g denied*, 155 FERC ¶ 61,157 (2016), *aff'd sub nom. Advanced Energy Mgmt. All. v. FERC*, 860 F.3d 656 (D.C. Cir. 2017) (approving market changes to compensate performance at times of system stress); *ISO New England Inc. and New England Pwr. Pool*, 147 FERC ¶ 61,172 (2014), *reh'g denied*, 153 FERC ¶ 61,223 (2015), *appeal pending sub nom. New England Power Generators Ass'n v. FERC*, No. 16-1023 (D.C. Cir. filed Jan. 19, 2016) (same); *Cal. Indep. Sys. Operator Corp.*, 156 FERC ¶ 61,226 (2016) (approving ramping products to complement increased variability and uncertainty); *Midcontinent Indep. Sys. Operator, Inc.*, 149 FERC ¶ 61,095 (2014) (same).

⁷ *E.g.*, *Reactive Power Requirements for Non-Synchronous Generation*, Order No. 827, 81 Fed. Reg. 40,793 (June 23, 2016), FERC Stats. & Regs. ¶ 31,385 (2016); *Requirements for Frequency and Voltage Ride Through Capability of Small Generating Facilities*, Order No. 828, 81 Fed. Reg. 50,290 (Aug. 1, 2016), 156 FERC ¶ 61,062 (2016).

⁸ *E.g.*, *Frequency Response and Frequency Bias Setting Reliability Standard*,

Docket No. RM18-1-000, *et al.*

relied upon evidence to define it in a fuel-neutral way, and either allowed the market to transparently price it or established broad requirements to ensure that a needed service is provided. If the record that develops in this docket similarly demonstrates unmet resilience needs, I believe that the Commission should take a comparable approach.

Indeed, this preferred approach highlights one of my key objections to the Proposed Rule, which did not make a factual showing of a defined resilience need or allow a market or standards-based solution to solve that need. Rather, it presumed a resilience need and proposed a far-reaching out-of-market approach to “solve” it. This proposed remedy, which simply designated resources for support rather than determining what services needed to be provided, would be highly damaging to the ability of the market to meet customer needs—including any demonstrated resilience needs—fairly, efficiently, and transparently. In effect, it sought to freeze yesterday’s resources in place indefinitely, rather than adapting resilience to the resources that the market is selecting today or toward which it is trending in the future.

I believe the Commission should continue to focus its efforts not on slowing the transition from the past but on easing the transition to the future. We must continue to guide grid operators in sustaining reliability and resilience within a system that is likely to be cleaner, more dynamic, in some instances more distributed, and deployed by an efficient market for the benefit of customers. In this way, we can help the grid adapt to the transformations of the present, and best position the grid for the unknown future transformations that the history of our industry suggests are inevitable. For these reasons, I respectfully concur.

Cheryl A. LaFleur
Commissioner

Order No. 794, 146 FERC ¶ 61,024 (2014).

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Grid Reliability and Resilience Pricing

Docket Nos. RM18-1-000

Grid Resilience in Regional Transmission
Organizations and Independent System Operators

AD18-7-000

(Issued January 8, 2018)

CHATTERJEE, Commissioner, *concurring*:

I concur in this order with the expectation that it is only the first step in a more systematic effort by the Commission, over both the near and long term, to ensure the resilience of the nation's bulk power system. The success of this effort will require the Commission's continued vigilance and willingness to take, within the bounds of its statutory authority, prompt, proactive, and decisive measures to safeguard resilience.

I applaud Secretary Perry's bold leadership in jump-starting a national conversation on this urgent challenge. Given the importance of the bulk power system to our nation's security, economic stability, and public health and safety, we must ensure its resilience amidst tremendous changes in our generation resource mix. My goal throughout this proceeding has been to ensure that we do not later come to regret failing to ask the difficult questions. I believe that the order we are issuing today is a positive step toward that goal. I look forward to receiving responses to the questions posed to the RTOs/ISOs, and comments from interested entities.

Nevertheless, I must voice my concerns regarding bulk power system resilience in the interim period prior to the conclusion of the proceeding we initiate today. Major regulatory reform efforts often can take several years to complete. But I believe that the record compiled in this proceeding speaks to the prudence of considering, as soon as practicable, whether interim measures may be needed to avoid near-term bulk power system resilience challenges that could result from the rapid, unprecedented changes in our generation resource mix.

The scale and pace of those changes are staggering. Between 2014 and 2015 alone, the U.S. added approximately 15,800 megawatts (MW) of natural gas, 13,000 MW of wind, 6,200 MW of utility scale solar photovoltaic, and 3,600 MW of distributed solar photovoltaic generating capacity.¹ Meanwhile, nearly 42,000 MW of synchronous

¹ U.S. Energy Information Administration, *Electricity*, available at

generating capacity (e.g., coal, nuclear, and natural gas) retired between 2011 and 2014, with an additional seven nuclear units (representing 10,500 MW of nameplate capacity) planning retirement by 2025.² Commenters express an expectation that those trends will continue in the years ahead, with many nuclear and coal units particularly at risk of economic retirement despite their significant contribution to bulk power system resilience.³

The changing generation resource mix underscores the need to consider whether near-term measures are warranted notwithstanding the actions the Commission has taken in recent years that are outlined in today's order. Specifically, current RTO/ISO market design mechanisms are intended to incent generation resource owners to manage the fuel supply risks they can control -- not the spectrum of fuel supply risks beyond their control.⁴ The record clearly suggests that the latter class of risks are increasingly significant due to shifts in the generation mix and the fast-evolving national security threat environment.⁵ Neither current RTO/ISO tariffs nor the NERC Reliability

<https://www.eia.gov/electricity/annual/backissues.html>.

² *Id.*; NERC Comments, Docket No. RM18-1-000, at 4-5 (filed Oct. 23, 2017).

³ *See, e.g.*, Reply Comments of Peabody Energy Corporation, Docket No. RM18-1-000, at 10 (filed Nov. 7, 2017); Reply Comments of the Nuclear Energy Institute, Docket No. RM18-1-000, at 6-11 (filed Nov. 7, 2017); *see also* NERC Comments at 4-6 (noting the resilience contributions of coal and nuclear generation's dependable capacity, inertia and voltage control services, and fuel security).

⁴ The Commission has approved market constructs providing financial incentives for resource owners to procure firm fuel arrangements either through firm pipeline capacity or dual fuel capability. *See, e.g., ISO New England Inc.*, 147 FERC ¶ 61,172, at P 36 (2014) (endorsing pay-for-performance program); *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208, at P 22 (2015) (approving PJM's capacity performance construct). *See also Wholesale Competition in Regions with Organized Electric Markets*, Order No. 719, FERC Stats. & Regs. ¶ 31,281 (2008), *order on reh'g*, Order No. 719-A, FERC Stats. & Regs. ¶ 31,292 (2009), *order on reh'g*, Order No. 719-B, 129 FERC ¶ 61,252 (2009) (requiring RTO/ISO scarcity pricing that incents firm fuel arrangements). But generation resource owners relying on fuels delivered "just-in-time" from offsite supplies are not capable of managing risks to (1) the infrastructure that transports these fuels (e.g., pipelines); and (2) the infrastructure that supplies these fuels (e.g., natural gas wellheads).

⁵ *See, e.g.*, Exelon Corporation Comments, Docket No. RM18-1-000, Stockton Test. at 5-6, 13 (filed Oct. 23, 2017); *see also* Congressional Research Service, Pipeline Cybersecurity: Federal Policy (Apr. 19, 2016).

Standards require RTOs/ISOs to assess these fuel supply risks or other significant resilience risks and mitigate their potentially significant impact on the bulk-power system. This suggests that existing RTO/ISO tariffs may be unjust and unreasonable insofar as they may not adequately compensate resources for their contributions to bulk power system resilience.

Consequently, I believe it would have been prudent, in addition to establishing the proceeding in Docket No. AD18-7-000, for the Commission to issue an order to show cause pursuant to section 206 of the Federal Power Act directing each RTO/ISO to either (1) submit tariff revisions to provide interim compensation for existing generation resources that may provide necessary resilience attributes and are at risk of retirement before the conclusion of the proceeding established today or (2) show cause why it should not be required to do so.

Given the nascence of the Commission's effort to more systematically examine resilience, I believe that it would have been appropriate to provide the RTOs/ISOs with latitude in determining the implementation of any interim measures needed. In particular, I would have allowed RTOs/ISOs to define which resources provide necessary resilience attributes and are at risk of retirement before the conclusion of the proceeding initiated in Docket No. AD18-7-000. Because of their detailed knowledge of their own systems, the RTOs/ISOs are well-positioned to understand the specific resilience risks in their footprints, to identify the resilience attributes that would most effectively mitigate those risks, and to tailor appropriate tariff mechanisms to meet their needs. Such an approach would have struck an appropriate balance to remedy any potentially unjust and unreasonable compensation practices while minimizing the impact on consumers and markets as the Commission considered longer-term reforms. In addition, such an approach also would have reduced the probability of retirement of resources which subsequently were determined to be the most cost-effective means of providing necessary resilience attributes.

The Commission previously has stressed its preference for market-based mechanisms as a means to ensure just and reasonable rates in jurisdictional organized markets. I share this preference for market-based solutions and would have urged RTOs/ISOs to identify market mechanisms to address these concerns. However, the Commission also has recognized that interim, out-of-market solutions might be appropriate in certain circumstances.⁶ Accordingly, I would have required that tariff

⁶ See *ISO New England Inc.*, 144 FERC ¶ 61,204 at P 21 (accepting ISO-NE tariff provisions to provide for short-term out-of-market payments to resources to ensure reliability in the 2013-2014 winter period); see also *N.Y. Indep. Sys. Operator, Inc.*, 150 FERC ¶ 61,116 at P 2 ("While the Commission has repeatedly stated that our jurisdictional markets should utilize market mechanisms to ensure that the resulting rates are just and reasonable, the Commission has also recognized that short-term remedies,

revisions proposed by the RTOs/ISOs endeavor to minimize the effect on the wholesale markets (in particular the energy markets). To this end, I would have stated an expectation that each RTO/ISO develop any out-of-market mechanisms only as a last resort.

As I explained consistently over the past few months, it was my goal that any effort with respect to an interim step would be legally defensible, would not distort markets, and would address the issues Secretary Perry raised. I believe an order as discussed above would have met that goal. And while I would have preferred such an order, I am nevertheless encouraged by today's order, which represents a positive step forward in addressing these critical issues.

For these reasons, I respectfully concur.

Neil Chatterjee, Commissioner

such as RMR agreements, may be appropriate in certain circumstances to address an immediate problem at hand.”).

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Grid Reliability and Resilience Pricing

Docket Nos. RM18-1-000

Grid Resilience in Regional Transmission Organizations
and Independent System Operators

AD18-7-000

(Issued January 8, 2018)

GLICK, Commissioner, *concurring*:

I fully support the Commission's action today to initiate a new proceeding examining the resilience of the bulk power system. I commend the Chairman for his leadership in guiding the Commission as it addresses this difficult, but important issue. I also support the Commission's decision to terminate Docket No. RM18-1-000, which addressed the Proposed Rule on Grid Reliability and Resilience Pricing (Proposed Rule) submitted to the Commission by the Secretary of the Department of Energy. The Proposed Rule had little, if anything, to do with resilience, and was instead aimed at subsidizing certain uncompetitive electric generation technologies. As my colleague Commissioner LaFleur explains, it is important to consider the resilience of the bulk power system in a larger context that accounts for the changing electricity industry rather than seeking to preserve the *status quo*.

I write separately to explain my rationale for concluding that the Proposed Rule is inconsistent with the Commission's statutory responsibilities. Although the Department had the authority under Section 403 of the Department of Energy Organization Act¹ to submit the Proposed Rule, the Commission could adopt the proposal only if it met the requirements of section 206² of the Federal Power Act. The Proposed Rule fails to meet that standard.

As today's order recognizes, the record in this proceeding—as well as the other proceedings referenced by the Department³—does not support the Department's

¹ 42 U.S.C. § 7173 (2012).

² 16 U.S.C. § 824e (2012).

³ *Grid Resiliency Pricing Rule*, 82 Fed. Reg. 46,940, 46,944-45 (2017).

contention that the tariffs of certain RTOs and ISOs are unjust and unreasonable or unduly discriminatory or preferential. The Department's own staff Grid Study concluded that changes in the generation mix, including the retirement of coal and nuclear generators, have not diminished the grid's reliability or otherwise posed a significant and immediate threat to the resilience of the electric grid.⁴ To the contrary, the addition of a diverse array of generation resources, including natural gas, solar, wind, and geothermal, as well as maturing technologies, such as energy storage, distributed generation, and demand response, have in many respects contributed to the resilience of the bulk power system. The record in this proceeding does not demonstrate any need for the Commission to interfere with the continued evolution of the bulk power system.

Nor does the record support the Department's proposed remedy: A multi-billion dollar bailout targeted at coal and nuclear generating facilities.⁵ There is no evidence in the record to suggest that temporarily delaying the retirement of uncompetitive coal and nuclear generators would meaningfully improve the resilience of the grid. Rather, the record demonstrates that, if a threat to grid resilience exists, the threat lies mostly with the transmission and distribution systems, where virtually all significant disruptions occur.⁶ It is, after all, those systems that have faced the most significant challenges during extreme weather events.

⁴ *Staff Report to the Secretary on Electricity Markets and Reliability*, United States Department of Energy at 63, 100 (Aug. 2017), available at https://energy.gov/sites/prod/files/2017/08/f36/Staff%20Report%20on%20Electricity%20Markets%20and%20Reliability_0.pdf (Department of Energy Grid Study).

⁵ See, e.g., PJM Independent Market Monitor Comments at 5 (estimating that the Proposed Rule would have cost consumers in PJM an additional \$30 billion in 2015 and \$32 billion in 2016); Joint Industry Commenters, Attachment A at 2, 32 (Battle Group report estimating that the Proposed Rule would result in \$3.7 billion to \$11.2 billion in out-of-market payments annually in PJM, ISO-NE, and NYISO); see also Electricity Consumers Resource Council Reply Comments at 11-15 (summarizing cost estimates submitted to the record, all of which estimated that the Proposed Rule would cost consumers billions of dollars).

⁶ See Joint Industry Commenters at 3 (citing a Rhodium Group study showing that "0.00007% of customer-hours lost to outage were caused by fuel supply emergencies between 2012-2016," a period that included the 2014 Polar Vortex); Department of Energy, Quadrennial Energy Review, Second Installment at 4-2 (2017) available at <https://energy.gov/sites/prod/files/2017/02/f34/Chapter%20IV--Ensuring%20Electricity%20System%20Reliability%2C%20Security%2C%20and%20Resilience.pdf> ("Electricity outages disproportionately stem from disruptions on the

In addition, coal and nuclear generators face resilience challenges of their own. As has been well-documented, many coal and nuclear plants with significant on-site fuel supplies have failed to function during extreme weather events because those fuel supplies froze, flooded, or were otherwise unavailable.⁷ In fact, initial reports indicate that coal-fired facilities accounted for nearly half of all forced outages in PJM during last week's period of extreme temperatures. Similarly, during the same period, the Pilgrim Nuclear Power Station was manually removed from service complicating efforts to serve load within ISO-NE. And, even when fully operational, many coal and nuclear generators are incapable of providing all the NERC-defined essential reliability services.⁸ It is perhaps for that reason that the Department's Grid Study recommended pursuing "wholesale market and product designs that recognize and complement resource diversity by compensating providers for the value of [essential reliability services] on a *technology-neutral* basis."⁹

Finally, I am sympathetic to the plight of coal miners, who have been disproportionately affected as coal's share of the generation mix has declined. These men and women went to work every day, at considerable risk to their health and safety, to supply coal when it was needed most. Many of those same considerations extend to individuals employed at recently or soon-to-be decommissioned nuclear power plants.

distribution system (over 90 percent of electric power interruptions), both in terms of the duration and frequency of outages. . . . Damage to the transmission system, while infrequent, can result in more widespread major power outages that affect large numbers of customers with significant economic consequences.").

⁷ For example, more than 15 gigawatts of coal and nuclear capacity were forced offline during the 2014 Polar Vortex as temperatures fell below those plants' operating thresholds. Electric Power Supply Association Comments, Attachment A at 17. Similarly, nuclear facilities lying in the path of hurricanes are routinely taken offline as a precaution and not returned to service until after the threat has passed.

⁸ Department of Energy Grid Study at 71-72 (citing Joseph H. Eto *et al.*, Lawrence Berkeley National Laboratory, Use of Frequency Response Metrics to Assess the Planning and Operating Requirements for Reliable Integration of Variable Renewable Generation (2010), *available at* <https://www.ferc.gov/industries/electric/indus-act/reliability/frequencyresponsemetrics-report.pdf>). The cited report explains that when nuclear plants and large coal plants are operated at maximum output, as they frequently are, they will be incapable of providing primary frequency response, one of the essential reliability services identified by NERC.

⁹ Department of Energy Grid Study at 100 (emphasis added).

We have a history in this country of helping those who, through no fault of their own, have been adversely affected by technological and market change. But that is the responsibility of Congress and the state legislatures. It is not a role that the Federal Power Act provides to the Commission.

* * *

I agree with the Commission's decision to initiate a comprehensive examination of the resilience of the bulk power system in the form of today's order. Utilities face diverse challenges, including the threat of cyber or physical attacks and natural disasters, such as the extreme weather events that are occurring more frequently as a result of climate change. It is not without irony that the Department's Proposed Rule would exacerbate the intensity and frequency of these extreme weather events by helping to forestall the retirement of coal-fired generators, which emit significant quantities of greenhouse gases that contribute to anthropogenic climate change.¹⁰ I encourage the RTOs and ISOs to use this opportunity to undertake a serious review of these challenges along with other concerns regarding the resilience of their system.

In addition, RTOs and ISOs should consider how best to mitigate these challenges *within* their markets and *without* prejudging what technology or fuel-type provides the best solution. In particular, I urge them to consider carefully the Commission's questions regarding how different generation technologies—both traditional technologies and newer, less widespread technologies—perform when faced with extreme weather, including droughts. I also believe that it is important to consider the advantages that newer technologies, such as distributed energy resources, energy storage, and micro-grids, may offer in addressing resilience challenges to the bulk power system. Similarly, I urge the RTOs and ISOs to consider carefully the Commission's question regarding the extent to which resilience challenges are associated with the transmission system or distribution systems, rather than electric generation. As I noted, the transmission and distribution systems have historically been the principal cause of virtually all significant disruptions and are, therefore, an important element of any examination into the resilience of the bulk power system. Finally, I agree with the Commission that is important to explore the concept of correlated outages and, in particular, the extent to

¹⁰ A research paper submitted to the record by Resources for the Future estimates that adopting the Proposed Rule would result in an additional 53 million tons of CO₂ emissions by 2045. Resources for the Future also estimates that the Proposed Rule would cause 27,000 premature deaths by 2045 by increasing the emissions of other air pollutants (NO_x and SO_x). See Daniel Shawhan and Paul Picciano, Resources for the Future, Costs and Benefits of Saving Unprofitable Generators: A Simulation Case Study for US Coal and Nuclear Power Plants at 11 (Nov. 2017).

which the cyber and physical security of natural gas pipelines threatens the resilience of the bulk power system and how the Commission should address this issue.

In conclusion, I am confident that the Commission will approach this new examination into the resilience of the bulk power system in the same manner it considers all other matters—with a non-partisan perspective and with a view solely on what the facts provide and the law requires. If the RTOs and ISOs demonstrate that the resilience of the bulk power system is threatened we should act. If not, we should move on.

For these reasons, I respectfully concur.

Richard Glick
Commissioner

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WHITE HOUSE

Presidential limits: Trump can't come through for coal

Peter Behr and Saqib Rahim, E&E News reporters

Published: Wednesday, August 23, 2017

"Tell Cohn to do whatever these two want him to do."

This secondhand account of President Trump's directions on rescuing Ohio power utility FirstEnergy Corp. and its coal supplier, Murray Energy Corp., sounded like a boss to king. As president, it didn't work.

In an Aug. 4 letter obtained by the Associated Press, Robert Murray, chairman and CEO of Murray Energy, described a conversation with the president in which Trump ordered an aide to see that Gary Cohn, director of the White House National Economic Council, gave Murray and Charles Jones, CEO of FirstEnergy "whatever" they were asking for.

As the letter spells out in detail, unchallenged by the White House or Murray's company, Murray pleaded for a federal rescue for the Ohio utility's FirstEnergy Solutions merchant coal-fired generating plants, which stood "on the verge of bankruptcy."

"Their bankruptcy will force Murray Energy Corp. into immediate bankruptcy, promptly terminating our 6,500 coal mining jobs," with devastating losses to those coal communities, Murray said. "This would be a disaster for President Trump and for our coal miners and employees" (*E&E News PM*, Aug. 22).

But Trump could not deliver for the men he called "my coal miners," nor for Murray, one of his most outspoken political supporters. Murray was not one of the corporate CEOs who broke with Trump over the president's equivocal comments on the violence in Charlottesville, Va. Instead, he was an ally who said he was "praying and pacing the floor" election night, hoping for a Trump victory (*Greenwire*, Feb. 17).

In his letter to Trump White House aide John McEntee III, Murray said he had heard Trump direct Energy Secretary Rick Perry three times to rescue the companies, which sought a federal moratorium on further closings of Ohio coal-fired power plants. Murray quoted Trump saying, "I want this done."

But the only lever available to Perry — an action under Section 202(C) of the Federal Power Act — is restricted to short-term actions in response to emergencies that threaten power grid reliability or power delivery, not the chronic plight of coal plants that cannot compete with turbine generators running on cheap Ohio and Pennsylvania shale gas.

The history of this Power Act provision showed it to be an emergency remedy. Perry had ordered the Grand River Dam Authority in Oklahoma to keep operating a facility in April to provide voltage support for the nearby power grid, until replacement generation was available. It was invoked in 2008 in response to grid damage along the Gulf Coast from Hurricane Ike, in 2005 after Hurricane Rita, in 2003 following a blackout in the Northeast, and in 2000 to deal with the California energy crisis.

DOE spokeswoman Shaylyn Hynes said in a statement to the Associated Press, "We look at the facts of each issue and consider the authorities we have to address them, but with respect to this particular case at this particular time, the White House and the Department of Energy are in agreement that the evidence does not warrant the use of this emergency authority."

Melissa Powers, an associate law professor at Lewis & Clark Law School, said Murray's letter was "self-defeating," considering the help he was asking for.

"A letter that begins with a reference to President Trump telling an agency official to 'do whatever these two [Murray and the FirstEnergy CEO] want him to do' is exactly NOT the letter I would want to rely on in an administrative proceeding," she said. The letter focuses on impacts on the companies, not on grid reliability imperatives, Powers said.

John Moore, director of the Natural Resources Defense Council's Sustainable FERC Project, and NRDC clean energy attorney Miles Farmer commented in a blog that DOE's regulations make clear that the emergency authority is limited to "unexpected inadequate supply of electric energy," such as would be caused by "the unexpected outage of facilities" from events like "weather conditions" or "acts of God."

An emergency order would have had symbolic value at first. But what would be the benefit of ordering coal-fired power plants to keep operating when the administration cannot order utilities to buy their electricity — costing more than competitive power from gas generation?

When Trump ordered help for Murray and the coal industry, he appeared to be “following his instincts,” as he said he always liked to do as a boss.

But Trump this week, speaking about Afghanistan, said he realizes that decisions are different “when you sit behind the desk in the Oval Office. In other words, when you’re president of the United States.”

As he sat behind that same desk, should Trump have been told that Murray’s request couldn’t be met? Was he improperly briefed? Was he briefed and then ignored aides, or did he make promises he knew he couldn’t keep?

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Coal CEO Says Bailout No Longer Needed

Murray Energy chief credits pickup in exports to Asia for business revival

By Thomas H. Patten
And Andrew Ross

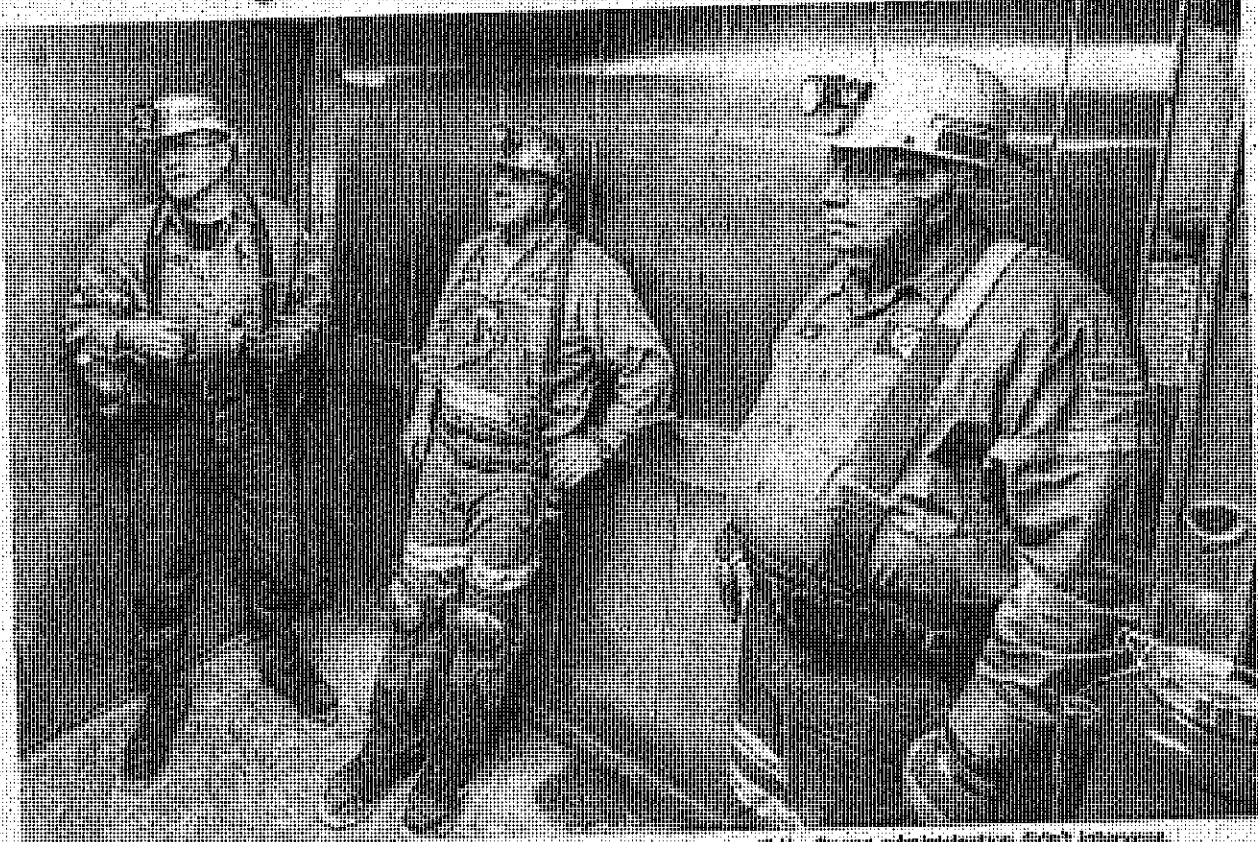
Coal magnate Robert Murray, after turning his company around, says the Midwest coal industry could be poised for a recovery if it gets a bailout from federal regulators, and he expects his company to thrive whether or not the Trump administration intervenes.

Mr. Murray, chief executive and controlling owner of Murray Energy Corp., said in an interview that turning around his company's growing exports to that region, along with his company's growing exports to that region, have revived his business. Growing Chinese imports, and a recovering global economy, drove up coal prices, offsetting a long-term decline in U.S. demand.

Murray Energy also is competing up sales in India with help from a London-based trading firm that the company helped open in 2013.

"We got the best coal company in the world," he said.

That optimistic outlook makes a strong contrast to what Mr. Murray has said about his business just days ago. Last summer, he told the *Wall Street Journal* that the company's Appalachian mines might close within an emergency timeline for the power-plant fleet at FirstEnergy



Murray Energy CEO Robert Murray, right, had warned of a possible bankruptcy if the Trump administration didn't intervene.

Corp., a major coal-burning customer of Murray Energy. A FirstEnergy subsidiary requested federal intervention last month and the Energy Department is weighing a response.

Mr. Murray says he plans to launch a new subsidiary to make his company the largest privately owned U.S. coal miner. Since 2011, the company

After Donald Trump was elected president, Mr. Murray rejected himself into the center of a national debate about what the Trump administration might do to save the struggling coal industry. He has asked Mr. Trump to declare an emergency order—one designed for times of war and natural disasters—to keep unprofitable coal-fired plants open, saying doing that creates

a national security risk. But Mr. Murray's critics say intervention undermines free competition and domestic markets.

An emergency request in favor of the Energy Department, Kennedy filed by a FirstEnergy subsidiary would benefit many of the plants in Ohio and the surrounding states that rely on Murray coal. It has already received the company's support in

series of acquisitions and by creating a trading house, Jovian Global Commodities Ltd., just as prices started to rebound. Mr. Murray spent much of 2014 and 2015 publicly fighting for more than \$4 billion in debt at Murray and a sister company, and an additional \$2 billion in equity with national, but now he is making them without trouble, he told

the *Journal*.

The country's electricity grid is in the middle of a historic transformation. Rapid technological advancements have made gas-fired and renewable power cheaper, putting demand for older coal-fired competitors at risk. The viability of a number of corporations—and thousands of jobs—are on the line.

Some states have approved help for nuclear power plants, and FirstEnergy has forced a similar decision on the Trump administration. In late March it asked the Energy Department to declare an emergency under a highly used, 43-year-old law to guarantee profits for its nuclear and coal-fired plants and dozens of others across the Midwest and Mid-Atlantic states. Its FirstEnergy Solutions power-generation business, based in PPS, filed for bankruptcy protection two days later.

PPS operates coal-powered plants in Ohio and Pennsylvania with combined capacity some 4,700 megawatts. It was bankruptcy earnings from PPS last year that prompted Mr. Murray to warn last year that Murray Energy too, could go under. He said an PPS chapter 11 would tip Murray Energy into an "imminent bankruptcy," as well.

But Murray Energy hasn't filed for bankruptcy protection and doesn't need to, Mr. Murray told the *Journal*. It isn't clear whether Murray Energy's supply chain with PPS will survive these bankruptcy challenges. An PPS spokesman declined to comment.

PHOTO BY AP/WIDEWORLD

Utility Says Power Plants Will Stay Open During Bankruptcy

Attorneys for FirstEnergy Solutions say the company's coal and nuclear power plants will keep producing electricity while the company undergoes reorganization under bankruptcy.

April 4, 2018, at 10:32 a.m.

f [https://w](https://www.)

RPS

AP

AKRON, Ohio (AP) — Attorneys for FirstEnergy Solutions say the company's coal and nuclear power plants will keep producing electricity while the company undergoes reorganization under bankruptcy.

The FirstEnergy Corp. subsidiary told a U.S. Bankruptcy Court judge in Akron that it should have enough money to remain operating and pay its employees during the reorganization.

FirstEnergy Solutions said while filing for bankruptcy protection on Saturday that it faces billions of dollars in debt and increasing pressure from natural gas power plants.

The company operates two nuclear plants in [Ohio \(/news/best-states/ohio\)](#), and one in [Pennsylvania \(/news/best-states/pennsylvania\)](#). It also has coal-fired power plants in both states.

But FirstEnergy Solutions said Tuesday that the long-term future of the plants remains in question.

Last week, the utility said it intends to shut down its nuclear plants within three years.

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Tags: Pennsylvania (<https://www.usnews.com/topics/locations/pennsylvania>), Ohio (<https://www.usnews.com/topics/locations/ohio>), Utility-says-power-plants-will-stay-open-during-bankruptcy%3Fsrc=usn tw&text=Utility%3Fsrc=usn rd).

Akron Beacon Journal/Ohio.com

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FirstEnergy Solutions bankruptcy could take years; consumer impact review begins

Published: April 7, 2018 - 6:40 PM | Updated: April 7, 2018 - 11:06 PM

By Jim Mackinnon

Beacon Journal/Ohio.com

The FirstEnergy Solutions Corp. court case, involving some 14,000 creditors, billions of dollars in debt, a small army of lawyers, plus putting at stake the future of nuclear and coal power plants, could take years to resolve, says a local bankruptcy lawyer.

Meanwhile, efforts have started to look into how consumers may be impacted as the unregulated generation arm of Akron electric utility FirstEnergy Corp. goes through the early stages of the Chapter 11 bankruptcy process.

FirstEnergy Solutions filed for bankruptcy protection in Akron on March 31, which allows it to continue operating while undergoing a court-supervised reorganization. The FirstEnergy subsidiary operates two nuclear power plants in Ohio and one in Pennsylvania, as well as coal-fired power plants.

The bankruptcy filing was hinted as coming as far back as November 2016, when parent FirstEnergy Corp. said it planned to become a fully regulated utility and was looking to sell off power plants and debt-laden FirstEnergy Solutions.

There probably won't be a quick resolution to the complex case, said one legal onlooker.

"It can take, on the short end, five or six years [to resolve]. I would think it can

DOE-17-0427-B-001486

4/9/2018

FirstEnergy Solutions bankruptcy could take years; consumer impact review begins

take longer than that, said Joseph Ferrise, staff attorney for the downtown Akron office of the Chapter 13 trustee, who oversees local individual bankruptcy cases. Ferrise also teaches law classes, including on bankruptcy, at the University of Akron.

Critical documents

With the initial April 3 court hearing behind it, FirstEnergy Solutions now will have about 18 months to file two critical bankruptcy documents, Ferrise said.

The first document will be a disclosure statement that lists assets, liabilities and more, much of it redundant information from other filings, he said. Creditors need the document to make informed business decisions.

The other critical document will be FirstEnergy Solutions' plan of reorganization, he said. It will show, among other things, how much FirstEnergy Solutions intends to pay creditors — and creditors likely will contest at least some of what the plan proposes, Ferrise said.

While one industry analyst last week said parent FirstEnergy Corp. could decide to pay as much as \$2.7 billion to try to quickly resolve the bankruptcy, Ferrise indicated he did not think that was likely — and added if FirstEnergy decided that was its best option, the process could still take years.

The bankruptcy will rack up significant legal expenses, he said. Some of the numerous lawyers involved make as much as \$700 to \$900 an hour, he said.

The end result of the Chapter 11 process will ultimately be a stronger FirstEnergy that is positioned for decades of good financial health and performance, Ferrise said.

"I'm a homer. I hope this goes well," he said. "I think that's a viable and reasonable thing to expect."

U.S. Bankruptcy Judge Alan M. Koschik, who is overseeing the case, is well qualified for the task, Ferrise said. Koschik's background includes previous work as a Chapter 11 bankruptcy attorney.

"He is in his element. He's going to have a real good feel for this case," Ferrise said.

Customers must wait

Residential and business electricity customers of FirstEnergy may also have to wait a while to see how the Chapter 11 bankruptcy could affect them.

4/9/2018

FirstEnergy Solutions bankruptcy could take years; consumer impact review begins
wait a while to see how the Chapter 11 bankruptcy could impact their
pocketbooks.

The Public Utilities Commission of Ohio last week opened a case on its docket seeking to protect Ohio consumers from any adverse impact from the FirstEnergy Solutions bankruptcy filing.

The PUCO has said the bankruptcy will not cause anyone to go without electricity because of measures in place to ensure the continued delivery of power. Ohio law requires local utilities to step in and supply electricity in case a supplier is unable to fulfill its contractual responsibilities.

In its April 4 filing, the PUCO said it cannot guarantee that contracts entered into by FirstEnergy Solutions prior to the bankruptcy filing will not be impacted.

The PUCO filing directs FirstEnergy Solutions to file a report by May 4 saying, among other things, whether it will be able to continue to serve existing retail customers including government aggregations, and to disclose any other material changes.

The Ohio Consumers' Counsel office said it will file comments for consumer protection in the PUCO case.

"FirstEnergy Solutions has proposed in its bankruptcy filing to continue to honor the contracts it has with its customers," the OCC said Friday. "The FirstEnergy utilities known as Cleveland Electric Illuminating, Ohio Edison and Toledo Edison are not part of the bankruptcy and their rates are unaffected."

A FirstEnergy Solutions spokeswoman in early March said bankruptcies largely involve creditors and have little impact on residential customers.

FirstEnergy Solutions cited costly environmental requirements, weak electricity demand and strong competition from cheap, fracked natural gas and renewable energy sources as reasons for needing to reorganize under Chapter 11. The company has 3,076 employees, most of whom work at the power plants, with 118 employees in Akron.

Days prior to the bankruptcy filing, FirstEnergy Solutions told the federal government it intends to shut down and decommission its three nuclear plants, at an estimated cost of more than \$1.8 billion, by 2021. It asked President Donald Trump's administration to intervene to keep the plants running.

While in West Virginia on Thursday, Trump said his administration will look into using emergency powers to keep coal and nuclear plants open. He did not name FirstEnergy in the off-the-cuff comments, which come DOE-17-0427-B-001488

4/9/2018

FirstEnergy Solutions bankruptcy could take years; consumer impact review begins
FirstEnergy in the on-the-run comments, which came a day after a private dinner meeting with a FirstEnergy lobbyist.

The next regularly scheduled hearing for FirstEnergy Solutions in U.S. Bankruptcy Court in Akron is 9 a.m. April 26.

Reporter Jim Mackinnon covers business and county government. He can be reached at 330-996-3544 or jmackinnon@thebeaconjournal.com. Follow him @JimMackinnonABJ on Twitter or <http://www.facebook.com/JimMackinnonABJ>

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Unit Name	Capacity	Fuel Type	Reliability Must Run (RMR)
Beaver Valley U1 Nuclear Generating Unit	909	Nuclear	No
Beaver Valley U2 Nuclear Generating Unit	902	Nuclear	No
Davis Besse U1 Nuclear Generating Unit	896	Nuclear	No
Perry U1 Nuclear Generating Unit	1247	Nuclear	No
Hopewell James River Cogeneration	92	Coal	No
Laurel Mountain Battery Storage	0	Battery	No
Reichs Ford Road Landfill Generator	1.7	Methane	No
Bayonne Cogen Plant (CC)	163	Natural Gas	No
Morris Landfill Generator	1.9	Methane	No
Pleasants Power Station U1	639	Coal	No
Pleasants Power Station U2	639	Coal	No
Evergreen Power United Corstack	25	Biomass	No
Oyster Creek Nuclear Generating Station	607.7	Nuclear	No
Marcus Hook Refinery Co-gen (MH50) {Sun Oil}	49.6	Natural Gas	No
Bellemeade	265.7	Natural Gas	No
Bremo 3	71	Natural Gas	No
Bremo 4	156	Natural Gas	No
Buggs Island 1 (Mecklenberg)	69	Coal	No
Buggs Island 2 (Mecklenberg)	69	Coal	No
Chesterfield 3	100	Coal	No
Chesterfield 4	162.1	Coal	No
Possum Point 3	96.7	Natural Gas	No
Possum Point 4	221	Natural Gas	No
Colver NUG	110	Coal	No
Crane 1	190	Coal	No
Crane 2	195	Coal	No
Crane GT1	14	Oil	No
Three Mile Island Unit 1	802.8	Nuclear	No
Edgecomb NUG	116	Coal	No
Spruance NUG 1	116	Coal	No
Spruance NUG 2	86	Coal	No
Killen 2	600	Coal	No
Killen GT1	18	Oil	No
Stuart 2 (joint owned unit)	580	Coal	No
Stuart 3 (joint owned unit)	580.4	Coal	No
Stuart 4 (joint owned unit)	577	Coal	No
Stuart Diesels 1-4	9.2	Oil	No
BL England 2	155	Coal	Yes
Bay Shore 1	136	Other	No
W H Sammis 2	160	Coal	No
W H Sammis 3	176	Coal	No
W H Sammis 4	172.6	Coal	No
W M Sammis 1	160	Coal	No
Sewaren 1	102.8	Natural Gas	No
Sewaren 2	118	Natural Gas	No
Sewaren 3	106.2	Natural Gas	No

Sewaren 4	123.6	Natural Gas	No
Elmer Smith Unit 1	52	Coal	No
Wagner 2	135	Coal	No
Yorktown 2	165	Coal	Yes
Yorktown 1	159	Coal	Yes

Status	State	Age	Transmission Owner Zone	Owner Notification Date
Future Deactivation	Pennsylvania	42	DL	3/28/2018
Future Deactivation	Pennsylvania	31	DL	3/28/2018
Future Deactivation	Ohio	41	ATSI	3/28/2018
Future Deactivation	Ohio	31	ATSI	3/28/2018
Future Deactivation	Virginia	28	Dominion	3/14/2018
Future Deactivation	West Virginia	6	APS	3/14/2018
Future Deactivation	Maryland	9	APS	3/1/2018
Future Deactivation	New Jersey	12	PSEG	2/28/2018
Future Deactivation	Illinois	17	ComEd	2/16/2018
Future Deactivation	West Virginia	38	APS	2/16/2018
Future Deactivation	West Virginia	38	APS	2/16/2018
Future Deactivation	Pennsylvania	8	ME	2/2/2018
Future Deactivation	New Jersey	46	JCPL	2/2/2018
Future Deactivation	Pennsylvania	28	PECO	1/17/2018
Future Deactivation	Virginia	21	Dominion	1/16/2018
Future Deactivation	Virginia	68	Dominion	1/16/2018
Future Deactivation	Virginia	60	Dominion	1/16/2018
Future Deactivation	Virginia	26	Dominion	1/16/2018
Future Deactivation	Virginia	26	Dominion	1/16/2018
Future Deactivation	Virginia	66	Dominion	1/16/2018
Future Deactivation	Virginia	58	Dominion	1/16/2018
Future Deactivation	Virginia	63	Dominion	1/16/2018
Future Deactivation	Virginia	56	Dominion	1/16/2018
Future Deactivation	Pennsylvania	22	PENELEC	11/22/2017
Future Deactivation	Maryland	55	BGE	10/27/2017
Future Deactivation	Maryland	53	BGE	10/27/2017
Future Deactivation	Maryland	49	BGE	10/27/2017
Future Deactivation	Pennsylvania	43	ME	5/30/2017
Future Deactivation	North Carolina	27	Dominion	4/18/2017
Future Deactivation	Virginia	25	Dominion	4/18/2017
Future Deactivation	Virginia	25	Dominion	4/18/2017
Future Deactivation	Ohio	35	Dayton	3/17/2017
Future Deactivation	Ohio	35	Dayton	3/17/2017
Future Deactivation	Ohio	47	Dayton	3/17/2017
Future Deactivation	Ohio	45	Dayton	3/17/2017
Future Deactivation	Ohio	43	Dayton	3/17/2017
Future Deactivation	Ohio	48	Dayton	3/17/2017
Future Deactivation	New Jersey	52	ACE	12/28/2016
Future Deactivation	Ohio	61	ATSI	7/22/2016
Future Deactivation	Ohio	56	ATSI	7/22/2016
Future Deactivation	Ohio	55	ATSI	7/22/2016
Future Deactivation	Ohio	54	ATSI	7/22/2016
Future Deactivation	Ohio	57	ATSI	7/22/2016
Future Deactivation	New Jersey	67	PSEG	1/12/2016
Future Deactivation	New Jersey	67	PSEG	1/12/2016
Future Deactivation	New Jersey	66	PSEG	1/12/2016

Future Deactivation	New Jersey	64	PSEG	1/12/2016
Future Deactivation	Kentucky	51	External	11/30/2015
Future Deactivation	Maryland	56	BGE	6/16/2015
Future Deactivation	Virginia	53	Dominion	10/9/2012
Future Deactivation	Virginia	54	Dominion	11/7/2011

Requested Deactivation Date	Projected Deactivation Date	Actual Deactivation Date
5/31/2021	5/31/2021	
10/31/2021	10/31/2021	
5/31/2020	5/31/2020	
5/31/2021	5/31/2021	
3/31/2019	3/31/2019	
6/6/2018	6/6/2018	
5/31/2018	5/31/2018	
6/1/2018	6/1/2018	
5/31/2018	5/31/2018	
1/1/2019	1/1/2019	
1/1/2019	1/1/2019	
5/3/2018	4/30/2018	
10/1/2018	10/1/2018	
6/1/2019	6/1/2019	
4/16/2018	4/16/2018	
4/16/2018	4/16/2018	
4/16/2018	4/16/2018	
4/16/2018	4/16/2018	
4/16/2018	4/16/2018	
12/1/2018	12/1/2018	
12/1/2018	12/1/2018	
12/1/2018	12/1/2018	
12/1/2018	12/1/2018	
9/1/2020	9/1/2020	
6/1/2018	6/1/2018	
6/1/2018	6/1/2018	
10/31/2019	6/1/2018	
9/30/2019	9/30/2019	
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4/30/2017	4/30/2019	
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5/31/2020	5/31/2020	
5/31/2020	5/31/2020	
5/31/2020	5/31/2020	
5/31/2020	5/31/2020	
6/1/2018	6/1/2018	
6/1/2018	6/1/2018	
6/1/2018	6/1/2018	

6/1/2018	6/1/2018	
6/1/2019	6/1/2019	
6/1/2020	6/1/2020	
6/11/2018	6/11/2018	
6/11/2018	6/11/2018	

[illegible]

Reliability analysis complete; no impacts identified
Reliability analysis complete; no impacts identified
Reliability analysis complete; no impacts identified
Reliability issue identified
Reliability issue identified

TEAC Materials

<https://www.pjm.com/-/media/committees-groups/committees/teac/20180111/20180111-teac-generation-deactivation-20180111.pdf>
<https://www.pjm.com/-/media/committees-groups/committees/teac/20171214/20171214-teac-generation-deactivation-20171214.pdf>
<https://www.pjm.com/-/media/committees-groups/committees/teac/20171214/20171214-teac-generation-deactivation-20171214.pdf>

<https://www.pjm.com/-/media/committees-groups/committees/teac/20170504/20170504-generation-deactivation-20170504.pdf>
<https://www.pjm.com/-/media/committees-groups/committees/teac/20170504/20170504-generation-deactivation-20170504.pdf>

<https://www.pjm.com/-/media/committees-groups/committees/teac/20140605/20140605-reliability-analysis-updated-20140605.pdf>

https://www.pjm.com/-/media/committees-groups/committees/teac/20120427/20120427-reliability-analysis-ug
https://www.pjm.com/-/media/committees-groups/committees/teac/20120427/20120427-reliability-analysis-ug

RMR Zonal Cost Allocation

<https://www.pjm.com/-/media/planning/gen-retire/2017-2018-zonal-cost-allocation-for-retaining-bl-england-2-a>

https://www.pjm.com/-/media/planning/gen-retire/zonal-cost-allocation-for-retaining-yorktown-1-and-2-generators
https://www.pjm.com/-/media/planning/gen-retire/zonal-cost-allocation-for-retaining-yorktown-1-and-2-generators

RMR Study Results

<https://www.pjm.com/-/media/planning/gen-retire/bl-england-units-2-and-3-generator-deactivation-notification>

https://www.pjm.com/-/media/planning/gen-retire/yorktown-units-1-and-2-generator-deactivation-notification-
https://www.pjm.com/-/media/planning/gen-retire/yorktown-units-1-and-2-generator-deactivation-notification-

Related Upgrades

b2989

b2989

b2990, b2991

b2990, b2991

b2984

b2816

b2816

b2826.1, b2831.2, b2830, b2832, b2826.2, b2879.2, b2879.1, b2878, b2828, b2831.1

b2826.1, b2831.2, b2830, b2832, b2826.2, b2879.2, b2879.1, b2878, b2828, b2831.1

b2490, b2483, b2489, b2477, b2478, b2485, b2480.1, b2480.3, b2486, b2476, b2480.2, b2482, b2481, b2479, b2

b1910
b1906.4, b1905.4, b1907, b1905.3, b1905.1, b1906.1, b1909, b1905.5, b1905.9, b1912, b1905.6, b1906.2, b1910

487, b2484, b2488, b2491

, b1908, b1905.2, b1906.5, b1905.8, b1905.7, b1906.3, b1911

U.S. Coal Mogul Murray Wants to Run Power Plants Too

By **Tim Loh**

April 10, 2018, 12:23 PM EDT

Updated on April 10, 2018, 4:38 PM EDT

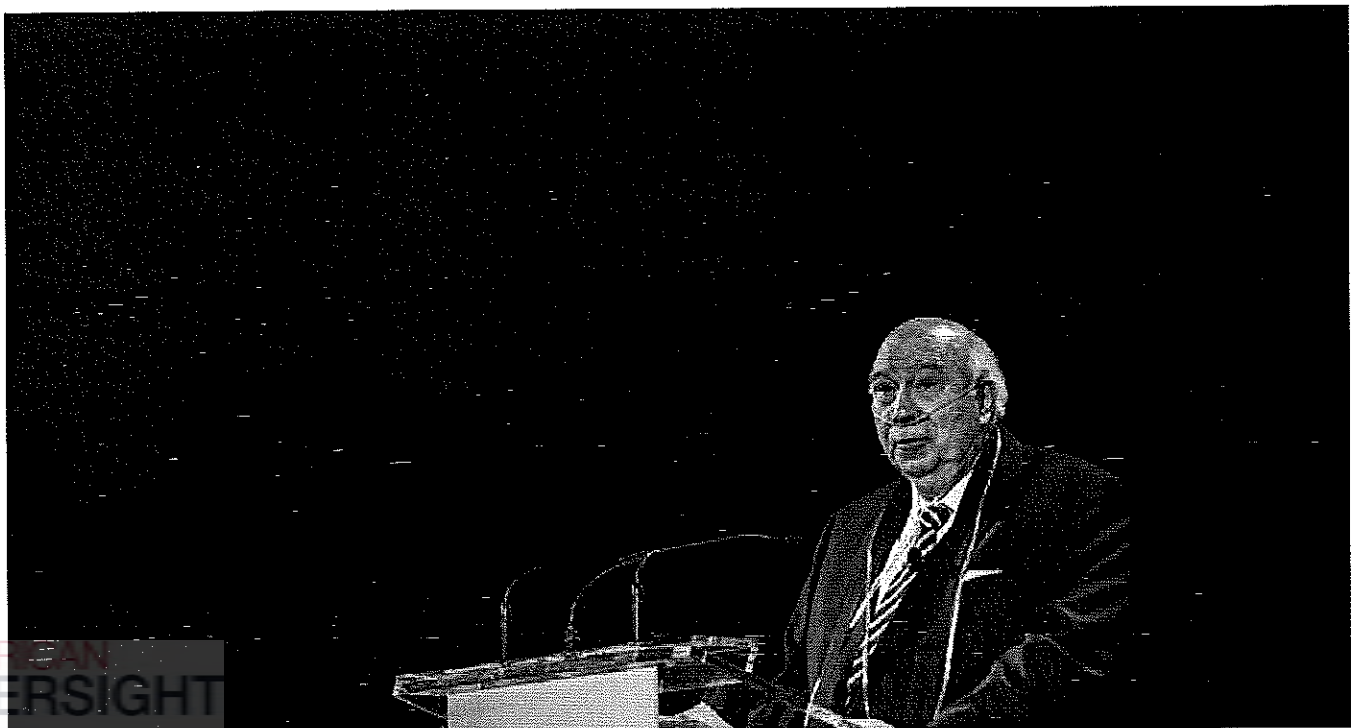
From

→ CEO Bob Murray says his company isn't at risk of bankruptcy

→ Plan would be 'culmination' of Murray's life work, he says

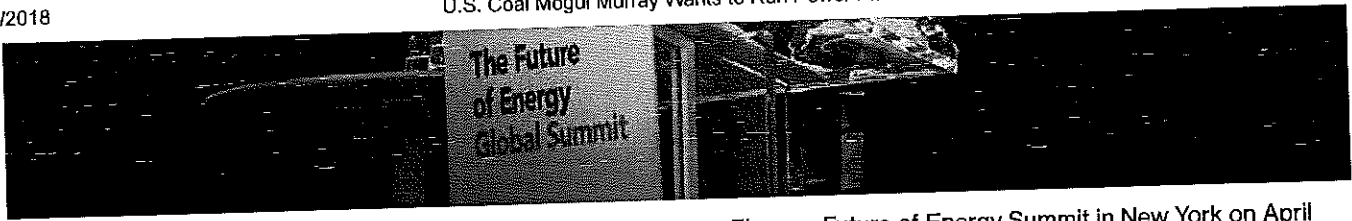
Murray Energy Corp. Chief Executive Officer Bob Murray wants to buy coal-fired power plants to shore up his mining company.

An acquisition could happen as early as this year, allowing the company to mine coal, transport it to plants and then burn it to generate power, Murray said on the sidelines of the Bloomberg New Energy Finance Future of Energy Summit in New York.



4/13/2018

U.S. Coal Mogul Murray Wants to Run Power Plants Too - Bloomberg



Murray Energy CEO Bob Murray speaks at Bloomberg New Energy Finance Future of Energy Summit in New York on April 10. Craig Warga

"It'd be the culmination of my life's work," he said. "It's a new concept. If you control the fuel supply, you can price it how you want it."

Murray has mulled such a purchase for at least 15 years but has come close only twice -- both in the past couple of years. The problem has been money, as utilities typically sell off the sites' capacity payments when they close coal fired plants. That creates cash-flow problems for a potential buyer that could fester for several years.

He has his eye on five different plants, including some of the assets of bankrupt <https://www.bloomberg.com/news/articles/2018-04-01/coal-generator-that-trump-tried-to-save-files-for-bankruptcy> FirstEnergy Solutions -- the W.H. Sammis plant in Ohio and Bruce Mansfield facility in Pennsylvania, both of which are for sale. Also attractive is FirstEnergy Corp.'s Pleasants Power Station <https://www.firstenergycorp.com/content/dam/corporate/generationmap/files/Pleasants%20Facts.pdf>, he said. The West Virginia facility is scheduled to close in early 2019.

"If you can dig coal out of the ground, you sure as heck can run a power plant," he said. "We can run power plants better than the utilities can."

FirstEnergy

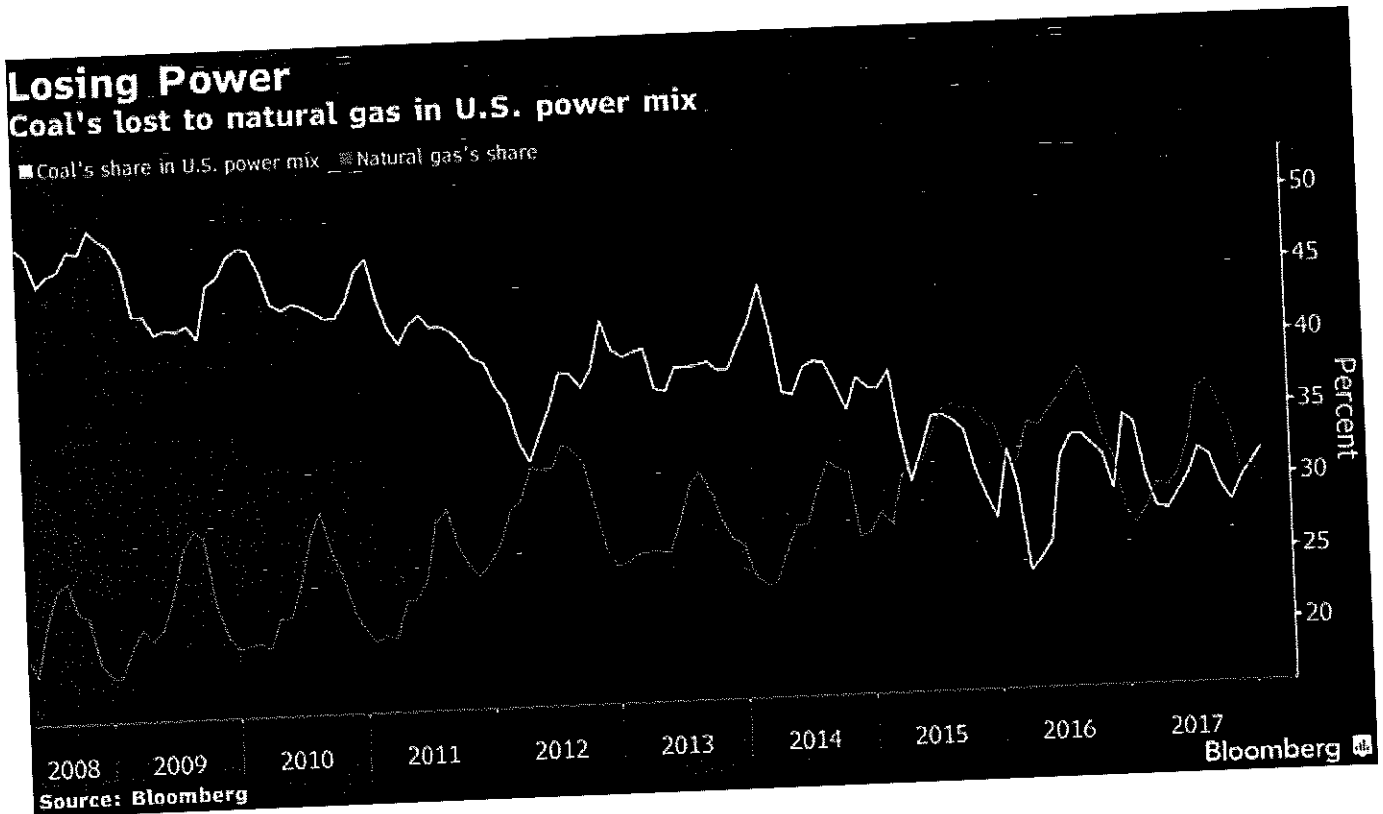
The possibility of going after FirstEnergy assets is an about face from last summer, when Murray said his company might get dragged into a restructuring by FirstEnergy Solutions. He dismissed that possibility Tuesday.

Murray Energy is in a better position this year as its overseas sales have boomed. The company plans to export 22.5 million tons of coal this year, almost a third of its overall production and the most ever. Much of the credit goes to Javelin Global Commodities, a joint venture Murray helped form in 2015 with, among others, former Goldman Sachs Group Inc. employees. The London-based trader has the potential to grow as global coal demand continues to shift toward Asian markets.

4/13/2018

U.S. Coal Mogul Murray Wants to Run Power Plants Too - Bloomberg

Murray -- who has three sons in their 40s working for the company -- said that in 10 years, Murray Energy could own as many as five coal-fired power plants and produce 110 million tons of thermal coal a year, about a sixth of his forecast for annual U.S. production then. He's not sure if U.S. thermal coal output will have fallen below 650 million tons a year by then, as that will depend on whether the leaders of America's utilities get behind coal.



But if coal slips below 25 percent of the country's power mix, "people are going to freeze in the dark," he said. It's expected to account for 29 percent of utility-scale power generation in 2018, according to government forecasts.

To keep the lights from going out, Murray expects the U.S. government to declare a power-grid emergency so impressive in scale that it would trigger payments to keep some coal and nuclear power plants online.

That controversial action -- under Section 202(c) of the Federal Power Act -- is the "only option right now," he said.

4/13/2018

U.S. Coal Mogul Murray Wants to Run Power Plants Too - Bloomberg
Careers Made in NYC Advertise Ad Choices Website Feedback Help

Q. I don't understand the opposition between FirstEnergy and AEP. Don't they operate under the same set of rules?

by AEP Ohio on May 21, 2012

A. AEP Ohio and FirstEnergy are making the transition to a competitive market at different times.

FirstEnergy started the switch in 1999, shortly after Ohio legislators passed Senate Bill 3. This allowed a majority of Ohioans to choose who they wanted to buy generation from.

At the same time, generation rates were reduced by 5 percent and then frozen for five years.

High-cost service territories, such as First Energy, saw a significant number of customers switch to lower-cost generation providers. Low-cost service territories, such as ours, saw little to no switching.

FirstEnergy began to corporately separate its assets with a two-phase, five-year plan. **FirstEnergy received nearly \$7 billion in stranded cost recovery.** The company has continued to recover these costs through 2010.

During the same period, regulators repeatedly asked us to wait to move to a competitive market because our rates were stable and lower than market rates. At the request of state regulators, we contractually committed our generation to serve our customers through 2015. We did the right thing for Ohio and its electric consumers by providing below market generation rates to customers.

Last year, a surplus of power driven by the economic downturn and other forces has driven market rates below AEP Ohio's rates. Regulators have asked us to complete the transition to market.

We're asking for a three-year transition to unwind the contractual and legal obligations we entered into with the support of the Public Utilities of Ohio. This transition will ensure robust competition between strong competitors that will produce the lowest rates possible for all Ohioans while fairly compensating the company for assets currently dedicated to customers, but used by competitors for profit.

From → Fair Transition to Competition

1. tony blankenship permalink

what a load of BS, 2 years ago all the power companies got a rate increase to help pay for the cost of transporting fuel(because of the raise in gas prices). not once did u drop prices when those cost came down instead u gave the management a bigger bonus. now that the cost of transporting said fuel is back to those rate but the fuel itself has gone down you're ask for another raise. someday (and that day is getting near) the average joe will get tired of are politicians pandering to big corporations, i think we need to regulate power companies again and put all new politicians in office so at least our pay hikes will be used for all NEW bribes and just not maintance fees on the OLD bribes.

Reply

DOE-17-0427-B-001514

2. Kaye Presutti [permalink](#)

Well Tony, it's clear you are pissed! However dissatisfied you are with AEP, let me tell you that as a First Energy customer I'm aware that First Energy has been no less generous with their bonuses; the PUCO dealt different deals for AEP and First Energy over this transition period, now the PUCO needs to level the playing field by permitting AEP's graduated rate increase (sadly). Then customers of both companies will hopefully see legitimate competition.

Reply

3. Mark [permalink](#)

I work for HP. We took a pay cut. Same thing. AEP says they want to 'save' jobs...which translates to 'I want to make more money'. What if the workers, bosses, CEO's...etc took a pay cut? Then rate hikes would not have to happen and the AEP employees would be in the same boat as the rest of us. HP could sell computers for hundreds more than they do now...then I wouldn't have to take a pay cut...same thing with AEP.

Reply

4. Elizabeth [permalink](#)

The majority of AEP employees are also AEP customers. So taking a paycut will not solve anything, they still have to pay their electric bills just like everyone else.

Reply

5. Edward Phillips [permalink](#)

Unfortunately for AEP and other "old-line" utilities, the chickens are finally coming home to roost. I worked as a contractor with several old line east coast utilities in the 1980s and 1990s (not AEP). During all of our meetings with management, we noticed that most of the office personnel appeared to be not busy at all – many playing personal games! Also, almost every time we visited the offices, several key management executives appeared to be out playing golf! Since these companies were regulated by state commissions, we couldn't understand the low productivity levels. We later found out that the companies were guaranteed a profit by the State over and above their costs so there was very little incentive, if any, to reduce costs. It didn't help that they were being regulated by incompetent political commissions and audited by unethical accounting firms. To sum up, now that these bloated utilities face competition from companies that are better managed, they must drastically reduce costs and it will be extremely painful for them. It's a shame that the newer workers will have to suffer the layoffs, pension cut-backs, etc. The "old-line" managers who are responsible for the mess are probably long gone after cashing in their stock options and drawing out huge pensions. (reminds me of the problems faced by city, state and federal governments.)

Reply

6. Phyllis Davis [permalink](#)

To switch or not to switch? Which is the best deal??? and Why?

Reply

4/13/2018

Q. I don't understand the opposition between FirstEnergy and AEP. Don't they operate under the same set of rules? | AEP Ohio Answers

From: justin johnson
To: AskOE
Subject: Invoking Section 202(c) is bad.
Date: Sunday, April 15, 2018 3:13:26 PM

Invoking Section 202(c) to bail out failing and dirty coal plants is stupid. Why not spend money and effort working with cleaner natural gas and clean energy(wind, solar) sources. If FirstEnergy and others like it could not see the writing on the wall that natural gas and other sources of energy were the way they should be moving then they need to die and let forward looking companies take over the market.

From: Justin Klinger
To: AskOE
Subject: Section 202c
Date: Sunday, April 15, 2018 4:16:13 PM

Please do not use a fake state of emergency to interfere in the running of the electrical power generation industry. Free market economics and existing regulations are more than adequate to ensure reliable electricity. Also, the mining, transportation, and burning of coal is responsible for far more health issues and deaths than the imagined power outage would. So if there really were an emergency, it would be that we're already burning too much coal. Please act like a Republican and keep big government out of business.

Assuming you'll continue to ignore the interests of taxpayers,
Justin Klinger

From: Juan Lang
To: AskOE
Subject: Do not use section 202.c to keep uneconomical plants afloat
Date: Sunday, April 15, 2018 7:29:41 PM

Secretary Perry appears to be building a case that certain plants are critical to national security in general, in order to be able to apply section 202.c to provide assistance to keep plants afloat. This is the wrong approach to take. The energy industry has to be able to function without major government interference. If an individual operator cannot, it can use existing mechanisms like bankruptcy protection to cope. If this is not enough to keep the grid as a whole healthy, this is a matter for the congress to attend to. Stretching an existing statute beyond all recognition, suggesting that we are eternally at war or in a state of disaster, to help an individual operator is a mockery of the statute's authors and an abuse of the secretary's power.

From: Leif Laudamus
To: [AskOE](#)
Subject: 202c
Date: Sunday, April 15, 2018 1:44:07 PM

In regard to secretary Perry's invoking of 202c, in the opinion of this voter, this runs contrary to what our national long-term clean energy goals should be. There is no such thing as "clean coal." Anything other than the phasing out of coal-fired power plants runs counter to America's best interests. Sincerely, Leif Laudamus

From: christina lemieux
To: [AskOE](#)
Subject: Corporate coal bailouts
Date: Sunday, April 15, 2018 4:37:57 PM

I find it reprehensible to think that my tax dollars will go to bailout of a failing industry. What Happened to free market Enterprise? They failed after earning billions from America. Now they want Americans to pay to bail them out s they can profit of us. Communist do that because that can't admit that they were wrong. No bailout.

From: Rob L'Heureux
To: [AskOE](#)
Subject: Federal Power Action section 202(c)
Date: Sunday, April 15, 2018 3:33:50 PM

Hello,

I am writing as a private US citizen regarding the potential for invoking section 202(c) with respect to FirstEnergy. This power should not be invoked for this case. There is no energy crisis that demands immediate intervention. We are not at war, and the grid is not in any immediate danger. This is a failing business, which should not be rewarded with federal protection at taxpayer expense. They cannot provide energy reliably or cheaply enough on their own, and the market has valued them appropriately. The federal government should encourage the market to better address infrastructure challenges like these, not reward failing investments. By allowing this company to fail, it will create an opportunity for entrepreneurs and investors with more affordable and sustainable business practices.

Even if there were an immediate true crisis that demanded more electricity from the US, scaling up coal production to meet it would have hardly any lead time. Put your faith in American ingenuity, free markets, and opportunity – not fear, inefficient technology, and failing investments.

Sincerely,

Rob L'Heureux

From: ben lichtin
To: [AskOE](#)
Subject: the latest effort by the sec. of energy to burn coal
Date: Sunday, April 15, 2018 3:19:29 PM

I am unalterably opposed to the latest crying wolf refrain by the Energy Secretary to prop up

domestic old technology coal plants. His arguments are as transparently weak as the damage done to the environment

is great if his latest stunt is approved. On the DOE website are the many examples which

led to a 202c emergency order. NONE of these are remotely comparable to the situation

of First Energy's mothballing of certain of its energy plants due to factors that have

everything to do with competition in the domestic energy marketplace, that is, its bankruptcy, and nothing to do with

resilience of the grid. There has been no concern expressed by anyone in the regions served by these plants that energy supplies

will suffer as a result of these shutdowns. Have any of the affected state utility regulators expressed concern? I

am not aware of this. Nor did Perry cite convincing examples of such in his recent testimony.

So how this can possibly be characterized as a condition requiring imminent emergency invocation of 202c? Are we

doing government by hype and hysteria?

The publicity stunt that this effort represents is not much more than an effort to circumvent the effect upon market supply

forces unleashed by deregulation in the domestic energy supply market by using government authority

to choose winners and losers. It is bad enough this comes from a republican. It is even worse that

his effort is focused upon a genuine loser in the game. It is obscene that his effort is directed at getting more

carbon based energy into the energy use mix. It is exactly the opposite of what we should be doing, and with

government support.

You can't justify approving this emergency invocation of 202c if you believe in basing your

decisions upon careful consideration of all available evidence, as well as what commonly understood

uses of the term "emergency" should mean. Getting caught up in and being swayed by the heated, ridiculously exaggerated

rhetoric of Sec. Perry does no one, especially the domestic energy customer, ANY good at all. Indeed, the inevitable

consequence of approving this request will be higher prices for the end user...something he failed to point out

with nearly the same level of intensity. Curious fact that. Indeed, that dramatic choice he did articulate, between

keeping warm or staying nourished, will be precisely the consequence of allowing these plants to operate with

the higher prices required to keep them afloat.

Are we all supposed to sit back and allow such evidently self contradictory and hysterical rhetoric to dictate

policy for us? I would hope not. But times are very strange these days, and it is hard to say

whether we are still functioning as an enlightened state that makes policy for the greater good

by combining sound reasoning with a rigorous examination of all relevant evidence.

Ben Lichtin

From: Matthew McHarg
To: [AskOE](#)
Subject: Do not enact 202c
Date: Sunday, April 15, 2018 11:40:46 AM

No reason other than cronyism.

Respectfully Yours

Matthew G McHarg

Sent from my iPad

From: thomas mcrae
To: AskOE
Date: Sunday, April 15, 2018 11:22:41 AM

Dear Sirs:

I am writing to ask that you NOT invoke emergency powers that are neither necessary nor likely to be of a defined and temporary nature.

It is clear to me that you are playing politics in order to satisfy your political base and, more demonstrably, your need to placate an irrational and ignorant president.

I ask also that you consider the following likely consequences if you take this action:

- You will be propping up ever-more costly technologies to the detriment of cleaner and cheaper energy sources
- You will CAUSE the premature deaths of citizens to the extent that coal mines and coal fired plants remain in operation
- You circumvent the rule of law and that capriciousness chills the very investments that will provide the resiliency you claim to be seeking
- And, finally, you will not be "draining the swamp", but instead expanding it to the benefit of your donors and the rich and powerful who have access to the levers of government.

I am hopeful that my comments and those of my fellow citizens will be considered in the decision making process.

Sincerely,
Thomas McRae

From: Wesley Mokry
To: [AskOE](#)
Subject: Use of Section 202(c) for non emergency
Date: Sunday, April 15, 2018 11:35:49 AM

Perry's corruption doesn't seem to end. A business failing because of poor decisions isn't a good reason for the government to bail it out. The only emergency situation is the poor running of government under the current president. The trump* administration is continuing to drain the swamp by making it a cesspool.

*Lost the popular election by 2.8 MILLION votes - SAD.

From: Christopher O'Leary
To: [AskOE](#)
Subject: Nuclear power support
Date: Sunday, April 15, 2018 8:59:15 PM

To whom it may concern

I am a small business owner in the state of Pennsylvania that uses a significant amount of electric power that is very concerned about the prospect of the nuclear plant shutting down in Shippingport PA.

I understand that natural gas is very inexpensive today but it seems foolish to allow such an incredible asset of the nuclear plant be shutdown and thus wasted forever. If natural gas prices are to rise in the future which could easily happen due to any number of unknowns like issues drilling, well contamination, earthquakes etc we will be in a position where we really regret having lost this capacity.

I am by no means making a plea on an environmental basis or any one specific issue. I believe that we as a community have invested a tremendous amount in this infrastructure and it seems to be very shortsighted to let it go on the basis of cheap natural gas alone. We risk grid resiliency and price stability in the future where it appears that a modest subsidy not too dissimilar to what we do for solar and wind would go a long way toward energy security and stability.

Christopher O'Leary
VP Operations
Kenson Plastics

From: Alfred Purzycki
To: AskOE
Subject: Power Action section202(c) - D.O.E. Comment
Date: Sunday, April 15, 2018 7:35:18 PM

This is in regard to the Power Action section 202(c) proposed implementation.

This is the second time the DOE has attempted to subsidize Coal and Nuclear power plants with little justifications, the last time being at the request of a failing First Energy.

Section 202(c) was designed for use in **WARTIME** and **NATURAL DISASTER** to maintain power output.

There is no **WAR** that is impacting the American People at this time.

There is no **NATURAL DISASTER** that is still impacting the American people at this time (except in Puerto Rico, that this administration has ignored.)

Currently the DOE Secretary of Energy declares that grid resilience will be impacted without subsidies to the Coal and Nuclear industry but studies and Major grid operators have already contended that **grid resilience can be maintained and even improved without keeping uneconomic COAL and NUCLEAR plants online**. Today there are about 100 mandatory, enforceable standards, to ensure grid reliability in the United States.

Money proposed for the subsidy of nuclear and coal plants would be better spent for:

- Wind Energy (and associated research)
- Solar energy (and associated research)
- Utility Scale Battery Storage
- Hydro-electric and geothermal
- Natural Gas peaking plants

Wind and Solar will decrease our dependence on foreign sources for petrochemicals, improving our country's security and energy independence. Look at Texas's success in deploying wind turbines; although I think the D.O.E. Secretary has forgotten about Texas.

Utility scale Battery Storage will dramatically improve grid resilience no matter what source of energy involved (as proven successfully in Australia).

These top three can be done for less, in the long run, than attempting to maintain existing, aging and unprofitable energy solutions.

In closing, America needs to look forward, not back, for our energy needs. I personally want something better for myself, my children, my grandchildren and great grandchildren. I own an electric car, I have solar on my roof. I'm trying to do my part to improve our country's energy independence and security. I think this kakistocratical administration's Department of Energy should do their job! Act in the interest of the AMERICAN PEOPLE and not pander to archaic energy industry lobbyists and their feeble attempt to maintain preeminance in a changing world.

Retired Wireless Telecommunications Executive

Alfred Z. Purzycki
(b) (6)

From: Raelynn OLeary
To: [AskOE](#)
Subject: Nuclear Energy Support
Date: Sunday, April 15, 2018 9:47:57 PM

To Whom it May Concern,

I'm writing in support of any measures necessary to maintain operations at the Beaver Valley Nuclear plant.

The nuclear plant, as a source of reliable, renewable, carbon-free energy is imperative to the security of our energy grid and the economic prosperity of the region and the small town where I live. Closing the plant will force a dependence on natural gas. What happens when gas prices shift and it's no longer as cheap or as readily available?

It's my hope that our policymakers will take a long-term view and do whatever it takes to leverage the infrastructure we already have in place as a way to maintain our energy security.

Thank You,
Raelynn O'Leary
Beaver, PA

Sent from my iPhone

From: Nathan Schubert
To: AskOE
Subject: DOE's Use of Federal Power Act Emergency Authority
Date: Sunday, April 15, 2018 10:28:59 AM

It is beyond ridiculous that federal money is even being considered to bailout failing energy companies that for years have resisted moving energy production to cheaper, more sustainable forms. Corporate mismanagement and incompetence is NOT a federal emergency.

Nathan Schubert,
Pennsylvania, 17062.

From: specific instance
To: AskOE
Subject: 202c For FirstEnergy
Date: Sunday, April 15, 2018 2:57:09 PM

I'm opposed to using the provisions of 202(c) to rescue FirstEnergy from bankruptcy. While grid stability is a serious concern, maintaining coal-fired power plants will not ensure grid stability, as coal is subject to the same supply fluctuations as other fossil fuels. Grid stability would be better insured by focusing on renewable sources of generation and advancing grid storage technology. Maintaining a system leftover from the mid-20th century will only delay the development of a truly stable and secure energy grid.

--

-Alex

From: Brian Wirt
To: AskOE
Subject: Federal Power Action section 202(c)
Date: Sunday, April 15, 2018 5:00:36 PM

This is ridiculous. There is no emergency. This is nothing more than Trump administration stooges trying to prop up their polluting coal buddies.

Disgraceful. Perry should be fired.

Brian Wirt
Seattle, WA

From: Joshua Zelinsky
To: AskOE
Subject: Use of Section 202(c)
Date: Sunday, April 15, 2018 10:54:00 AM

To Whom It May Concern,

I am writing as a concerned citizen strongly opposed to the use of section 202(c) to functionally bail out and keep coal plants operating. If the economics do not support their existence then they should close; let the market solve for what plants are or are not productive. There's no substantial evidence that fewer coal plants will increase grid instability. It isn't even clear that running coal plants at all provides a net economic benefit as one can see from Muller, Mendelsohn, and Nordhaus. 2011. "Environmental Accounting for Pollution in the United States Economy." American Economic Review, 101 (5): 1649-75. Moreover, the use of authorization intended for war-time use stretches massively the idea of what constitutes a national security problem.

Sincerely,

Josh Zelinsky

From: Frank Callaham
To: AskOE
Subject: FPA section 202(c) should NOT be used now...
Date: Monday, April 16, 2018 12:09:41 AM

Coal and Nuclear power plants should either stand on their own or shutter. Power needs will be fulfilled based on supply and demand — we have an abundance of natural gas.

Stop politicizing the DOE to give a **handout** to coal and focus on the import work of the DOE.

Frank Callaham
Austin, TX

From: Rick Cermak
To: AskOE
Subject: Federal Power Action section 202(c)
Date: Monday, April 16, 2018 12:42:46 AM

The Energy Secretary spent most of his first year on the job laying the groundwork to propose a rule that would help coal and nuclear power plants stay afloat despite competition from low-cost natural gas. This proposal was solely for the purpose of fulfilling a Trump campaign promise to reinvigorate the coal industry and was rightly struck down. Now the Energy Secretary suggest that a state of emergency exists in energy that only coal subsidies can solve. Please reject this nonsense. There are many real emergencies that the government should address.

Gratefully,
Rick Cermak
(b) (6)

From: Doug Diamond
To: AskOE
Subject: Federal Power Action section 202(c)
Date: Monday, April 16, 2018 4:30:21 PM

To whom it may concern -

I am writing to document my opposition to the use of section 202(c) outside of a narrowly defined emergency situation as constituted by a natural disaster, extreme weather incident, or unexpected terrorist incident.

While our grid is definitely in need of upgrade, and ensuring that there is appropriate baseline power generation to support grid stability is vital, this is not the right tool to use. Failure of political will to effect real change to our power structure does not constitute an Emergency.

What has been proposed recently, namely to use this section to distort the market forces that have rightly devalued coal and fuel oil to the point where they are not viable production sources, is backward thinking, and will only harm our ability to build a stable, future-proof grid. It is nothing more than a bailout for companies that do not deserve our tax dollars, because they failed to understand the way energy markets were moving.

It is eminently possible to have a fully stable grid using renewables, natural gas, and nuclear, especially taking advantage of industrial-scale battery or capacitor storage. Both research and real-world practice prove this.

So no, I would not support use of section 202(c) for any purpose other than a narrowly defined, unpredictable disaster event.

Thank you,

Douglas Diamond
(b) (6)

From: bngoetz@wcnet.org
To: AskOE
Subject: Section 202(c)
Date: Monday, April 16, 2018 12:51:50 PM
Attachments: [FERC.pdf](#)
[Secretary Perry.pdf](#)

Honorable Rick Perry, Secretary of Energy,

My name is Brad Goetz. I am the Business Manager of IBEW Local 1413. Until there is a level playing field in the market we will continue to support nuclear energy and baseload generation. Local 1413 urges you to enact section 202(c) of the Federal Power Act on February 15, 2018. Congresswoman Kaptur and three other members wrote a letter to President Trump and yourself about the importance of baseload generation and nuclear power. We urge you not to delay and to compensate these nuclear and coal fired units appropriately for their full costs of operation by enacting section 202(c). Thank you for your time.

Thank you,
Brad Goetz



October 13, 2017

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

Re: Grid Resiliency Pricing Rule
FERC Docket No. RM18-1-000

**COMMENTS OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL
WORKERS, LOCAL UNION 1413 IN SUPPORT OF THE PROPOSED RESILIENCY
RULE**

On September 28, 2017, the Department of Energy ("DOE") issued the "Grid Resiliency Pricing Rule" (the "Proposal") directing the Federal Energy Regulatory Commission ("FERC") to adopt a rule requiring operators of organized markets to "ensure that certain reliability and resiliency attributes of electric generation sources are fully valued." Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in Ohio will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

IBEW Local 1413 strongly supports the Proposal and shares the Secretary's urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members' loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC has the requisite basis to act now. There is no time for delay. In addition to acting promptly, FERC should also direct organized

International Brotherhood of Electrical Workers

Local Union No. 1413 • P.O. Box 122 • Oak Harbor, Ohio 44871-0122 • 419-497-001540



market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Brad Goetz
President & Business Mgr.
IBEW Local 1413
PO Box 122, Oak Harbor, Ohio 43449
(b) (6)
bngoetz@wcnet.org

II. DESCRIPTION OF IBEW LOCAL 1413

IBEW Local 1413 is a progressive labor organization that represents security professionals in the Generation industry.

III. DESCRIPTION OF IBEW LOCAL 1413'S INTEREST IN PROCEEDING

IBEW Local 1413 is a party to a collective bargaining agreement with the owners of baseload coal and nuclear power plants located in Ohio. As a result, the wages, terms and conditions of employment of our members may be directly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, IBEW Local 1413 members have a direct and substantial interest in this proceeding. As well, the unique perspective of IBEW Local 1413 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in Ohio's electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across Ohio. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in Ohio provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to IBEW Local 1413 members. The Davis Besse and Bayshore generation stations directly employ approximately 144 IBEW Local 1413 members, and the maintenance and capital improvement work on these plants supports the local economy by creating thousands of well-paying union jobs for contractors. In addition, these plants contribute millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive economy in two ways. First, the preservation of certain plants will avoid the need to replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed, reliable

facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled (and specifically trained and experienced) employees, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

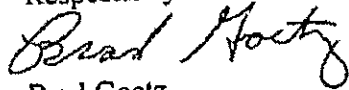
Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in Ohio, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, IBEW Local 1413 strongly urges FERC to adopt the rule proposed by the DOE as promptly and comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by the comments considered in this proceeding. FERC has thoroughly considered the impact of

electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of pre-mature closures.

In acting promptly, FERC should also direct the organized market operators to issue a rule that is not only compensatory (and based on the regulatory language of the Proposal) but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

Respectfully submitted,



Brad Goetz
President & Business Manager
IBEW Local 1413



Dear Secretary Perry,

Unions, labor and power plant workers across the country applaud the Department of Energy's study examining electricity markets, the value of baseload power and the long-term security and resiliency of the electric grid. Baseload coal and nuclear power plants employ more than 154,000 workers, produce major infrastructure projects that put Americans to work, and support a resilient electric grid.

Baseload power plants have long been the "work horses" of the electric system, providing energy to customers 24 hours a day, 365 days a year. With significant on-site fuel reserves, they provide the resiliency required to keep electricity flowing under all circumstances since their operation is not subject to interruption by extreme events such as weather or attacks on infrastructure that disrupt fuel delivery to other generation resources. Recently, EPA Administrator Pruitt noted as much when he talked about the consequences of an attack on key infrastructure. Our nation's security is dependent on maintaining these plants to support a resilient supply of electricity.

However, numerous baseload power plants have permanently shut down in recent years, and many more are expected to close prematurely in the very near future. Once they are gone, they are gone for good. Baseload generation is under serious threat from market-distorting subsidies and mandates, regulations that target these resources, low natural gas prices and markets that don't value resiliency. We are at a crisis point. Further decline in the number of plants will not only impact the grid and national security, it will cost valuable jobs and discourage industrial development opportunities nationwide. This is an outcome America simply can't afford.

Our baseload power plants and the dedicated, skilled workers who operate them are the lifeblood of their communities. They deliver a strong tax base and support between three and eight times more high-paying jobs than do other forms of electricity generation. We depend on these plants to create a robust workforce, and the country depends on them to support a healthy economy and electricity supply.

Unless action is taken, the long-term viability of baseload power plants along with the jobs and substantial economic opportunities they bring is at risk. And, our national security could be compromised if we don't ensure a resilient grid. We encourage the Administration to take prompt and meaningful action to protect baseload power plants and America's energy future.

Sincerely,

Brad Hart
Pres./B.A. IBEW Local 1413

International Brotherhood of Electrical Workers

Local Union No. 1413 • P.O. Box 122 • Oak Harbor, Ohio 42449 • 001545

AMERICAN
OVERSIGHT



From: Welsh, Michael D.
To: [AskOE](#)
Subject: Energy Supply Emergency
Date: Monday, April 16, 2018 10:44:40 AM
Attachments: [IBEW Third district.pdf](#)
[May 2017 IBEW District 3.pdf](#)

Rick Perry, Secretary
U. S. Department of Energy
1000 Independence Ave. SW
Washington, DC 20585

Dear Secretary Perry,

As in previous comments and due to recent weather events, the need for a resilient baseload generation is even more apparent today. It is essential that coal-fired and nuclear baseload generation be kept in the energy mix and be compensated appropriately to make sure they are available when called upon to provide energy to the grid. If coal-fired and nuclear units continue to close prematurely, the reliability of the United States energy grid could be in serious jeopardy. We ask that you issue an emergency order under the Federal Power Act Section 202(c) until the base-load generation issue is resolved. Thank you in advance for your attention to this important matter.

Sincerely,

Mike Welsh

International Vice President
IBEW Third District
412-269-4963



International Brotherhood of Electrical Workers



Michael D. Welsh, International Vice President
500 CHERRINGTON PARKWAY, SUITE 325
CORAOPOLIS, PA 15108
(412) 269-4963 • Fax (412) 269-4964

Lonnie R. Stephenson, International President
Kenneth W. Cooper, International Secretary-Treasurer

New York

New Jersey

Pennsylvania

Delaware

October 20, 2017

Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: Proposed Grid Resiliency Pricing Rule
RM 18-1-000

Dear Commissioner:

I am writing on behalf of the 115,000 members of the International Brotherhood of Electrical Workers (IBEW) who reside in the Third District, which encompasses the states of Delaware, New Jersey, New York, and Pennsylvania. In this diverse district, we represent hard working men and women from the electric utility, electric generation, construction and railroad industries.

We fully support the Department of Energy's quest to improve our nation's electric grid resiliency. It is our organization's stance that this is a matter of reliability for the public, as well as the security and safe, day-to-day operation of our country.

We believe that the proposed changes can be accomplished in a manner not to affect current market structure. In fact, we believe these measures to be the next logical steps to ensure our grid resiliency for generations to come. Our focus is to make sure these changes are done in a way that preserves the current market structure and to also prepare for the ever-changing demand that our country faces every day. Not only is it our position that these steps can be accomplished, but that it is imperative for America to stay at the forefront of electrical technology.

These types of actions are not new to the industry. FERC and the Regional Transmission Organizations (RTO) have historically valued certain alternatives differently.

The members of the IBEW have been made first hand witnesses to some near catastrophic events due to natural disasters that were averted by a well-balanced energy portfolio; from the Polar Vortex of 2014 to the more recent hurricane Harvey that struck the Gulf States. During each of these disasters, our grid could maintain reliability thanks in

International Brotherhood of Electrical Workers
Third District

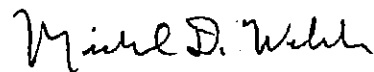
Federal Energy Regulatory Commission
Page 2

part to on-site, readily available fuel sources that were housed at several generation plants throughout the affected areas. We feel that this is a unique asset that our country's coal and nuclear generation fleet brings to the table. Unfortunately, some of the gas units were unable to stay online because of the interruption in fuel supply.

Going forward, we feel these efforts will ensure multiple fuel sources, as well as protect the resiliency of the grid.

We understand that the proposed timeline may seem daunting. However, we would like to extend our sincerest gratitude for your time and consideration of our views.

Sincerely,



Michael D. Welsh
International Vice President

MDW:jm



International Brotherhood of Electrical Workers



Donald C. Siegel, International Vice President
500 CHERRINGTON PARKWAY, SUITE 325
CORAOPOLIS, PA 15108
(412) 269-4963 • Fax (412) 269-4964

Lonnie R. Stephenson, International President
Salvatore J. Chilia, International Secretary-Treasurer

New York

New Jersey

Pennsylvania

Delaware

May 16, 2017

Rick Perry, Secretary
U. S. Department of Energy
1000 Independence Avenue SW
Washington DC 20585

Dear Secretary Perry:

I write to you on behalf of the Third District of the International Brotherhood of Electrical Workers (IBEW.) The IBEW Third District encompasses the states of Delaware, New Jersey, New York and Pennsylvania. According to a recent DOE/EIO study, "Pennsylvania is one of the top three electricity-generating states in the nation, along with Texas and Florida. Electricity generation regularly exceeds in-state consumption, making the state an important electricity supplier to the Mid-Atlantic region. Pennsylvania ranks second in the nation, after Illinois, in nuclear generating capacity, and nuclear power is the state's largest source of generation. The state's five nuclear stations have provided more than one-third of net electricity generation in recent years."

Unions, labor and power plant workers across the country applaud the Department of Energy's study examining electricity markets, the value of baseload power and the long-term security and resiliency of the electric grid. Baseload coal and nuclear power plants employ more than 154,000 workers, produce major infrastructure projects that put Americans to work, and support a resilient electric grid. These baseload plants are extremely important to our members and their communities.

Baseload power plants have long been the "work horses" of the electric system, providing energy to customers 24 hours a day, 365 days a year. With significant on-site fuel reserves, they provide the resiliency required to keep electricity flowing under all circumstances since their operation is not subject to interruption by extreme events such as weather or attacks on infrastructure that disrupt fuel delivery to other generation resources. Recently, EPA Administrator Pruitt noted as much when he talked about the consequences of an attack on key infrastructure. Our nation's security is dependent on maintaining these plants to support a resilient supply of electricity.

However, numerous baseload power plants have permanently shut down in recent years and many more are expected to close prematurely in the very near future. Once they are gone, they are gone for good. Baseload generation is under serious threat from market-distorting subsidies and mandates, regulations that target these resources, low natural gas prices and markets that don't value resiliency. We are at a crisis point. Further decline in the number of plants will not only impact the grid and national security, it will also cost valuable jobs and discourage industrial development opportunities nationwide. This is an outcome America simply can't afford.

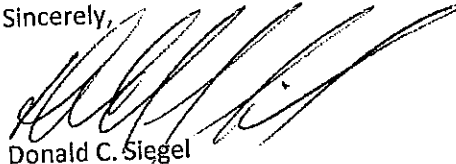
International Brotherhood of Electrical Workers
Third District

Secretary Rick Perry
May 16, 2017
Page 2

Our baseload power plants and the dedicated, skilled workers who operate them are the lifeblood of their communities. They deliver a strong tax base and support between three and eight times more high-paying jobs than do other forms of electricity generation. We depend on these plants to create a robust workforce, and the country depends on them to support a healthy economy and electricity supply.

Unless action is taken, the long-term viability of baseload power plants, along with the jobs and substantial economic opportunities they bring, is at risk. And, our national security could be compromised if we do not ensure a resilient grid. We encourage the Administration to take prompt and meaningful action to protect baseload power plants and America's energy future.

Sincerely,



Donald C. Siegel
International Vice President

DCS:jm

cc: PA US Senators
PA House Members



April 16, 2018

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

*Re: FirstEnergy Solutions' Request for Emergency Relief under Section 202(c) of the
Federal Power Act*

Secretary Perry:

The Natural Gas Supply Association respectfully submits this response to the above-referenced request filed on March 29, 2018 by FirstEnergy Solutions and its affiliates (collectively, FirstEnergy) with the U.S. Department of Energy (Department). For the reasons below, we believe there is no basis to grant this request, nor is there a basis for any action at this time that would interfere with operation of the PJM market or broadly seek to support coal or nuclear power plants. PJM has already written a response to the request stating that, "there is no immediate threat to system reliability."¹ It further stated that it has a detailed and clear process (via the PJM Tariff) to assess and address any concerns posed by the announced plant closures. Markets for electric power are serving consumers well. The Department should not use its authority to interfere in those markets, which would create inefficiencies and raise costs for consumers.

I. Comments of the Natural Gas Supply Association

FirstEnergy requests that the Department use its authority under Section 202(c) of the Federal Power Act to dictate that the owners of merchant coal and nuclear generators in PJM receive a guaranteed return on equity for four years. FirstEnergy requests a remedy that is beyond the

¹ See PJM Interconnection, *Response to FirstEnergy Solutions' Request for Emergency Relief under Section 202 of the Federal Power Act* (March 30, 2018) available at <http://www.pjm.com/-/media/documents/other-fed-state/20180330-response-to-fe-solutions-request-for-emergency-relief.ashx>

Department's authority to provide and that is based on a purported emergency lacking any basis in fact. For these reasons, the Department must deny the request.

Section 202(c) gives the Department authority to order generators to run during emergencies. Put differently, Section 202(c) allows the Department to make the act of generating electricity compulsory when it would otherwise be voluntary or, in some cases, prohibited by environmental laws. FirstEnergy would like to transform Section 202(c) from a narrow "must-run" authority into something it is not: a broad ratemaking authority akin to Sections 205 and 206 of the Federal Power Act. This is evident throughout their request. FirstEnergy does not ask that the Department order any generator to run² – an omission that cannot be squared with the statutory text. Nor does it attempt to determine how many coal and nuclear power plants must be required to run in order to alleviate the "emergency" it asks the Department to imagine. Tellingly, the only meaningful limitation FirstEnergy would impose on the scope of its requested order relates to the type of *compensation* these generators receive, and not whether each generator is necessary to address the supposed emergency.³

Instead of requesting a must-run order tailored to emergency circumstances, as applicants under Section 202(c) normally do, FirstEnergy requests rate relief. FirstEnergy asks the Department to increase the wholesale rates paid to a favored class of generators, and effectively unwind the wholesale market that the PJM stakeholders and the Federal Energy Regulatory Commission (FERC) have worked decades to develop. But Section 202(c) does not give the Department authority to supersede the FERC's authority over wholesale rates conferred in Sections 205 and 206 of the Federal Power Act. Of course, Section 202(c) ensures that generators receive "just and reasonable" terms for their actions carrying out the order. But compensation is not the purpose of Section 202(c). Rather, the reference to just and reasonable terms is only a necessary accommodation for the fact that the generator has been required to run and has therefore incurred costs. Moreover, Section 202(c) was enacted at a time when the Federal Power Commission had authority over the Federal Power Act as a whole, including Sections 205 and 206. Thus, reading Section 202(c) to provide separate ratemaking authority makes little sense within the broader context of the Federal Power Act.

For these reasons, the Department's regulations foreclose FirstEnergy's attempt to use Section 202(c) as an end run around FERC's wholesale rate authority. When it promulgated its

² FirstEnergy requests that the Department order certain generators to "enter into contracts and all necessary arrangements with PJM, on a plant-by-plant basis, to generate, deliver, interchange, and transmit electric energy, capacity, and ancillary services as needed to maintain the stability of the electric grid," and also to order "PJM to promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide to energy markets." FirstEnergy Request at 1. The first of these proposed directives would merely require that generators enter into contracts with PJM and does not specify that generation would be compulsory or that unit retirement would be prohibited or altered from the current generator deactivation rules contained in Part V of the PJM Tariff. The second of these directives solely addresses the compensation received by generators subject to the proposed order.

³ See FirstEnergy Request at 31 (excluding from the scope of its request generators that "recover any of their capital or operating costs through rates regulated by a duly authorized state regulatory authority, municipal government, or energy cooperative").

regulations implementing Section 202(c) after enactment of the Department of Energy Organization Act, the Department rightly left rate issues to FERC, stating that “this responsibility is vested in the Federal Energy Regulatory Commission (FERC) and must be addressed in its regulations.”⁴ Thus, in Section 205.376 of its regulations, the Department encouraged the use of existing rate schedules for service under 202(c) orders and made clear that FERC – not the Department – has responsibility for resolving “rate issues.”⁵ Nevertheless, notwithstanding this clear text and without explanation, FirstEnergy requests that the Department – not FERC – “step in and determine the just and reasonable compensation” for a broad swath of generators over a period lasting at least four years.⁶ Neither the Federal Power Act nor the Department’s regulations would authorize the Department to do so.

Not only has FirstEnergy failed to request relief that the Department has authority to provide, it has also failed to identify an emergency that may serve as a predicate for action under Section 202(c). Consistent with common usage of the word “emergency,” Section 202(c) and the Department’s regulatory definition describe emergency events variously as “sudden,” “unexpected,” and “imminent.”⁷ The retirements FirstEnergy wants to prevent are neither sudden, nor unexpected, nor imminent. Most obviously, the three nuclear plants FirstEnergy has proposed to retire would not be deactivated until 2021, and even then, only if PJM determines that they can retire consistent with system reliability. The same is true for all the merchant generators on FirstEnergy’s list, the overwhelming majority of which have not indicated any intention to retire in the near term.

Nor has FirstEnergy established that the retirement of certain uneconomic generators would create an emergency. Although the Department has authority to act in emergencies, it does not have authority over long-term reliability planning on the bulk electric system. That responsibility lies with FERC, its delegate the North American Electric Reliability Corporation, and the system operators themselves, in this case PJM. Each of these organizations has concluded emphatically that the PJM system is reliable. PJM currently has a reserve margin that well exceeds its 2018 target of 16.1%.⁸ Moreover, with respect to the recent Bomb Cyclone on which FirstEnergy’s request relies, PJM has stated that “[e]ven during peak demand, PJM had

⁴ See Economic Regulatory Administration, Energy, *Emergency Interconnection of Electric Facilities and the Transfer of Electricity to Alleviate an Emergency Shortage of Electric Power*, 46 Fed. Reg. 39,984, 39,985 (Aug. 6, 1981).

⁵ 10 C.F.R. § 205.376.

⁶ FirstEnergy Request at 32.

⁷ See 16 U.S.C. § 824a(c); 10 C.F.R. § 205.371.

⁸ U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 1 from Sen. Lisa Murkowski (Jan. 23, 2018) available at <http://www.pjm.com/-/media/library/reports-notice/special-reports/2018/20180220-qfrs-submitted-to-andrew-ott-from-20180123-senate-committee-hearing.ashx?la=en>.

excess reserves and capacity.”⁹ For the foregoing reasons, we believe there is no evidence to grant this request, nor is there any basis for the Department to take any other action that would interfere with operation of the PJM market.

Natural gas is an affordable, clean, and flexible fuel for electric generation. Within PJM specifically, it is a fuel that greatly enhances system reliability and resilience. PJM sits atop the Marcellus and Utica shale plays. These are among the most productive and fastest growing natural gas production areas in the world,¹⁰ with pipeline infrastructure that becomes more robust each year. FirstEnergy ignores these facts as well as other measures that PJM has taken to bolster generator performance such as its phased-in capacity performance rules that provide an incentive for generators to secure firmer fuel supplies, and which have already been shown to reduce forced outages.¹¹ Far from demonstrating an emergency, PJM’s response to the 2014 Polar Vortex and 2018 Bomb Cyclone show careful planning for an increasingly resilient grid.

II. Motion to Intervene

The NGSA hereby moves to intervene in this proceeding. Founded in 1965, NGSA represents integrated and independent energy companies that produce and market domestic natural gas, and is the only national trade association that solely focuses on producer-marketer issues related to the downstream natural gas industry. NGSA encourages the use of natural gas within a balanced national energy policy and supports the benefits of competitive markets. NGSA members trade, transact, and invest in the U.S. natural gas market in a range of different manners, and would be harmed by any exercise of Section 202(c) that restricts market competition and privileges uneconomic coal and nuclear generation. NGSA has consistently advocated for well-functioning power and natural gas markets, policies that support market transparency, efficient nomination and scheduling protocols, just and reasonable transportation rates, non-preferential terms and conditions of transportation services, and the removal of barriers to developing needed natural gas infrastructure. NGSA has a long-established commitment to ensuring a public policy environment that fosters a growing, competitive market for natural gas. NGSA also supports a

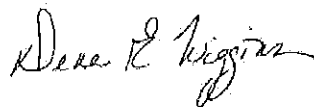
⁹ PJM Interconnection, *PJM Cold Snap Performance Dec. 28, 2017 to Jan. 7, 2018* at 1 (Feb. 26, 2018), available at <http://www.pjm.com/-/media/library/reports-notice/weather-related/20180226-january-2018-cold-weather-event-report.ashx> (“PJM Cold Snap Performance Report”).

¹⁰ See U.S. Energy Information Administration, *Dry shale gas production estimates by play at Appalachia region drives growth in U.S. natural gas production since 2012* (Dec. 4, 2017) at <https://www.eia.gov/naturalgas/data.php#production>; see also, U.S. Energy Information Administration <https://www.eia.gov/todayinenergy/detail.php?id=33972>.

¹¹ PJM Interconnection, *PJM Cold Snap Performance Dec. 28, 2017 to Jan. 7, 2018* (Feb. 26, 2018) at 20.

balanced energy future, one which ensures a level playing field for all market participants and eliminates inappropriate regulatory barriers to supply.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Dena E. Wiggins". The signature is fluid and cursive, with a large initial "D" and "W".

Dena E. Wiggins
President & CEO
Natural Gas Supply Association
1620 Eye Street, NW, Suite 700
Washington, DC 20006
dena.wiggins@ngsa.org

From: Pavlik, Greg (US - MABS)
To: AskOE
Subject: DOE should not bail out the power plants
Date: Monday, April 16, 2018 12:55:43 PM

We've been hearing for years about how the government should NOT be in the business of picking winners and losers. FirstEnergy isn't the victim of a natural disaster and the US isn't actively engaged in a war that's threatening the coal/nuclear power generation sector in any way whatsoever. FirstEnergy is losing money because other sources of power are cheaper and more readily available. Let the market adjust itself. Do not waste taxpayer dollars on a bail-out.

Greg Pavlik
Hudson, OH

Meggitt Aircraft Braking Systems Corporation d/b/a Meggitt Aircraft Braking Systems

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From: Nick
To: AskOE
Subject: DO NOT Bail Out FirstEnergy
Date: Monday, April 16, 2018 3:20:31 AM

To Whom it May Concern:

DO NOT Bail Out FirstEnergy. Doing so would be a flagrant abuse of Section 202(c) for the benefit FirstEnergy at the expense of taxpayers. It would reward mismanagement and subsidize dying technologies. The taxpayers should not shoulder the burden of solving the financial problems of private companies.

Sincerely,

Nick Providakis
Tallahassee, FL

From: Ted Romer
To: [AskOE](#)
Subject: Regarding "bailouts" for First Energy
Date: Monday, April 16, 2018 11:58:59 AM

Do not bail them out. First Energy made bad business decisions. They do not deserve a bailout. Do not use taxpayer money and do not force consumers to pay higher rates for electricity. Doing so rewards the bad decisions made by First Energy and will only encourage First Energy and other generators to make more bad decisions in the future.

Coal is dead. Republican leadership is flat out wrong. Coal is dead.

Respectfully,

Ted Romer

From: Will Toperoff
To: [AskOE](#)
Subject: Coal and nuclear bailout
Date: Monday, April 16, 2018 2:43:27 PM

Secretary Perry:

Please do not use our tax dollars to bail out fossil fuel and nuclear power companies when it is already established that these are huge sources of environmental destruction and pose an existential threat to our democracy and the world. Please use our tax dollars to invest in clean energies such as wind, solar, tidal and geothermal sources or even to find further research into fusion. These hold the promise of being environmental, good for our nation's economy and even for world peace.

Thank you.
Will Toperoff
SanDiego, CA

Sent from [BlueMail](#)

October 13, 2017

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

Re: Grid Resiliency Pricing Rule
FERC Docket No. RM18-1-000

**COMMENTS OF THE UTILITY WORKERS UNION OF AMERICA, LOCAL
UNION 457 IN SUPPORT OF THE PROPOSED RESILIENCY RULE**

On September 28, 2017, the Department of Energy (“DOE”) issued the “Grid Resiliency Pricing Rule” (the “Proposal”) directing the Federal Energy Regulatory Commission (“FERC”) to adopt a rule requiring operators of organized markets to “ensure that certain reliability and resiliency attributes of electric generation sources are fully valued.” Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in Ohio will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

UWUA Local 457 strongly supports the Proposal and shares the Secretary’s urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members’ loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC has the requisite

basis to act now. There is no time for delay. In addition to acting promptly, FERC should also direct organized market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Eric Cook
President
UWUA Local 457
(b) (6)

II. DESCRIPTION OF UWUA LOCAL 457

UWUA Local 457 is a progressive labor organization that represents individuals in the Electric Generation industry.

III. DESCRIPTION OF UWUA LOCAL 457'S INTEREST IN PROCEEDING

UWUA Local 457 is a party to a collective bargaining agreement with the owners of baseload coal and nuclear power plants located in Ohio. As a result, the wages, terms and conditions of employment of its members may be directly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, UWUA Local 457 members have a direct and substantial interest in this proceeding. As well, the unique perspective of UWUA Local 457 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in Ohio's electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across Ohio. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in Ohio provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to UWUA Local 457 members. UWUA 457 has approximately 250 members who work at the Sammis coal generating station. The maintenance and capital improvement work on these plants also supports the local economy by creating hundreds of well-paying union jobs for contractors during plant outages. In addition, these plants contribute millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive economy in two ways. First, the preservation of certain plants will avoid the need to replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed,

reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled (and specifically trained and experienced) employees, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in Ohio, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, UWUA Local 457 strongly urges FERC to adopt the rule proposed by the DOE as promptly and comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by

the comments considered in this proceeding. FERC has thoroughly considered the impact of electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of premature closures.

In acting promptly, FERC should also direct the organized market operators to issue a rule that is not only compensatory (and based on the regulatory language of the Proposal) but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

Respectfully submitted,

Eric Cook
President
UWUA Local 457

Document Content(s)

UWUA Local 457 Labor Comments 10.13.17.DOCX.....1-5

From: dcy665
To: AskOE
Subject: Section 202, Federal Power Act
Date: Monday, April 16, 2018 6:03:25 AM

Sirs, in particular clueless Secretary Perry,

From wanting to shutdown the Dept of Energy to deciding it must be used to keep Trump supporters out of bankruptcy is quite a leap. Not a leap of faith as I seriously doubt anyone in the country that isn't either the owner of FirstEnergy or a coal company employee has any faith in the coal business or this proposal.

The Federal Government of the USA should not be bailing out failed businesses that aren't able to compete. There is an Executive branch, it can request to the Legislative branch that the situation could be address in a proper manner. Sadly Mr. Perry is slightly out of touch for understanding what a national emergency is. A failing coal mine is not a national emergency. Of course, if we shut down all work on safeguarding our nuclear weapons then we have have three things; money for coal, a serious loss of deterrence and no counter to Russia/China and the other nuclear nations. But Secretary Perry would keep a promise he made to the voters. So there's that.

Coal will have uses, but powering America with polluting plants that cost more to run will hopefully not be the norm. Coal plants cannot adjust to the modern economy/environment. They are slow to start, slow to adjust generation capabilities and clearly are untenable without assistance.

Putting effort into modernizing the grid and securing the grid's infrastructure is worth Federal dollars. Bailing out a business is not a worthy goal. It is definitely not a national emergency.

David C Young
Portland, Oregon
US Citizen

From: joshua blumenkopf
To: [AskOE](#)
Subject: Section 202(c)
Date: Tuesday, April 17, 2018 3:23:41 PM

There is no grid emergency and no need for bailouts of FirstEnergy or any other firm that is outcompeted by cheaper, newer, electricity plants.

Sincerely,
Joshua Blumenkopf

From: Earl Dukerschein
To: [AskOE](#)
Subject: Emergency relief for Coal and Nuclear plants
Date: Tuesday, April 17, 2018 4:24:34 PM

Hello,

It is my opinion that we are moving to a distributed, resilient, electrical grid. Spend money on moving that forward, instead of holding it back.

Earl Dukerschein
(b) (6)

From: Paul Cameron
To: [AskOE](#)
Subject: Comments - Energy supply emergency under Section 202(c)
Date: Tuesday, April 17, 2018 9:40:38 AM
Attachments: [IBEW Local 459.pdf](#)

Dear DOE,

As the Business Manager of I.B.E.W. Local 459, I previously sent a correspondence on behalf of the nearly 1900 members I represent asking for the government to take action in this matter to support our electric generation plants.

We are asking your consideration to support base-load generation. The nuclear and coal-fired units must be compensated appropriately for their full cost of operation to maintain these important assets. They are needed for grid resiliency, support of our families and the tax base of the communities where the plants are located. The closure of these facilities is devastating in many ways. We urge you to issue an emergency order pursuant to Federal Power Act Section 202(c).

Thank you for your time and consideration on this very important matter.

Paul L. Cameron

Business Manager/Financial Secretary

I.B.E.W. Local 459

(b) (6)

October 19, 2017

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

Re: Grid Resiliency Pricing Rule
FERC Docket No. RM18-1-000

**COMMENTS OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL
WORKERS, LOCAL UNION 459 IN SUPPORT OF THE PROPOSED RESILIENCY
RULE**

On September 28, 2017, the Department of Energy (“DOE”) issued the “Grid Resiliency Pricing Rule” (the “Proposal”) directing the Federal Energy Regulatory Commission (“FERC”) to adopt a rule requiring operators of organized markets to “ensure that certain reliability and resiliency attributes of electric generation sources are fully valued.” Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in Pennsylvania will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

IBEW Local 459 strongly supports the Proposal and shares the Secretary’s urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members’ loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC has the requisite basis to act now.

There is no time for delay. In addition to acting promptly, FERC should also direct organized market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Paul Cameron
Business Manager & Financial Secretary
IBEW Local 459
408 Broad St., Johnstown, PA 15906
814-535-7655
Paulibew459@gmail.com

II. DESCRIPTION OF IBEW LOCAL 459

IBEW Local 459 is a progressive labor organization that represents approximately 1,850 individuals working in the utility and baseload generation industry in Pennsylvania.

III. DESCRIPTION OF IBEW LOCAL 459'S INTEREST IN PROCEEDING

IBEW Local 459 is a party to collective bargaining agreements with owners of large baseload coal power plants located in Pennsylvania. As a result, the wages, terms and conditions of employment of our members may be directly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, IBEW Local 459 members have a direct and substantial interest in this proceeding. As well, the unique perspective of IBEW Local 459 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in Pennsylvania's electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across Pennsylvania. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in Pennsylvania provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to IBEW Local 459 members. The Keystone, Conemaugh, Homer City, Shawville and Seward generating stations produce approximately 6700 MW of power along with directly employing approximately 675 IBEW Local 459 members, and maintenance and capital improvement work on these plants supports the local economy by creating hundreds of well-paying union jobs for contractors. In addition, these plants contribute millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive economy in two ways. First, the preservation of certain plants will avoid the need to replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed, reliable

facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled (and specifically trained and experienced) employees, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

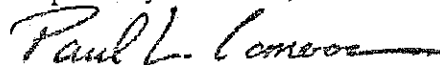
Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in Pennsylvania, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, IBEW Local 459 strongly urges FERC to adopt the rule proposed by the DOE as promptly and comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by the comments considered in this proceeding. FERC has thoroughly considered the impact of

electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of pre-mature closures.

In acting promptly, FERC should also direct the organized market operators to issue a rule that is not only compensatory (and based on the regulatory language of the Proposal) but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

Respectfully submitted,



Paul Cameron
Business Mgr. and Financial Secretary
IBEW Local 459

From: Mac User
To: [AskOE](#)
Subject: Bailing out Coal & Nuclear?????
Date: Tuesday, April 17, 2018 10:25:58 PM

What a crock of manure! Let the coal industry die in its own filth. Feel sorry for the coal miners? Train them for other jobs!

On Thursday, Perry admitted that the failure of his proposed coal compensation rule led him to consider using Section 202(c) to keep coal plants like those owned by FirstEnergy open. Perry's remarks in front of the House Subcommittee on Energy suggest he's hoping to build a case for the use of Section 202(c) by casting the current state of affairs in the US as an emergency.

"When we look at national security in particular, if you're in New York City and Wall Street were to lose power, I think anyone would say that puts our national security in jeopardy," Perry said.

The emergency exists on a personal level, too, the secretary asserted. "Why should any one be put in the situation to choose between turning the lights on and keeping my family warm?" Perry said, which seems to be a reference to how the natural gas supply is divided between residential heating and electric generation use. Perry added later, "It is imperative that we don't allow political decisions to be made relative to our... power security in the country." It was unclear to which political decisions the secretary was referring.

From: Pascal F. Martin
To: [AskOE](#)
Subject: Use of section 202(c) to bail out market losers
Date: Tuesday, April 17, 2018 2:23:06 AM

Dear sir,

I learned about the DOE plans to bail out bankrupt company FirstEnergy by invoking the authority conferred under section 202(c) to subsidies the continuing operation of its power plants.

I note that no grid operators seem to have requested such action, and that the general consensus is that there is a surplus of power generation available. In fact, the General Electric company is experiencing a downturn in the sales of its gas turbines, which it justifies by invoking this surplus.

It is also recognized that the competitive pressure on coal and nuclear power plants is caused by the low price of gas, which is due to the significant production increase thanks to the use of fracking technology. This administration has called for the growth of oil and gas production, which would certainly lead to a decrease in the price of gas, and more competitive pressure on coal and nuclear power plants.

Market conditions lead energy companies to migrate from coal and nuclear to gas and renewable energy simply due to their lower cost. This is freedom in action.

Apparently this administration does not like free market, and it seems to prefer controlling the economy by fiat. The general consensus is that this will lead to increased electricity price, lowering the purchasing power of the American people.

This begs a question: has the federal government decided to transform our free economy into a state-controlled one?

Has the current administration been infiltrated by communists?

Thank you.

Pascal Martin, Rancho Palos Verdes, CA.



State of New Jersey
DIVISION OF RATE COUNSEL
140 EAST FRONT STREET, 4TH FL
P.O. BOX 003
TRENTON, NEW JERSEY 08625

PHIL MURPHY
Governor

SHEILA OLIVER
Lt. Governor

STEFANIE A. BRAND
Director

April 17, 2018

VIA ELECTRONIC MAIL (AskOE@hq.doe.gov)

U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585

Re: Intervention of the New Jersey Division of Rate Counsel in FirstEnergy
Solutions Corp.'s Request for Emergency Action by the Department of
Energy under Section 202(c) of the Federal Power Act

Dear Sir/Madam:

This office represents the New Jersey Division of Rate Counsel ("NJDRRC") regarding FirstEnergy Solutions Corp.'s ("FES") Request for Emergency Action under Section 202(c) of the Federal Power Act submitted to the Department of Energy ("DOE") on March 29, 2018. On April 5, 2018, the NJDRRC submitted a Motion to Intervene to DOE Secretary James Richard Perry.

Subsequent to the NJDRRC's submissions, the DOE revised the section of its website regarding the DOE's Use of Federal Power Act Emergency Authority, stating the "DOE has established the AskOE@hq.doe.gov email address for the receipt of all materials related to Federal Power Act section 202(c). All public comments and requests should be sent in writing to AskOE@hq.doe.gov." The website also noted "[t]he provision of this process for submission of correspondence or comments on any pending application is for purposes of ensuring the receipt by the appropriate office and personnel within the Department."

Accordingly, the NJDRRC now re-submits its previously submitted Motion to Intervene to the AskOE@hq.doe.gov address. The NJDRRC reserves all rights in relation to the initial Motion to Intervene and Comments as of the time they were submitted to Secretary Perry.

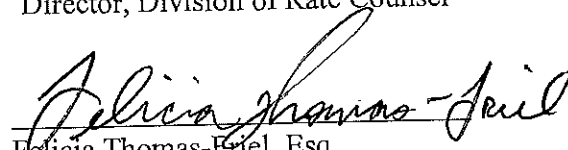
April 17, 2018
Page 2

Should you have any questions, please do not hesitate to contact me.

Respectfully submitted,

STEFANIE A. BRAND
Director, Division of Rate Counsel

By:


Felicia Thomas-Friel, Esq.
Deputy Rate Counsel

cc: Service List (w/encl., by electronic mail)



State of New Jersey
DIVISION OF RATE COUNSEL
140 EAST FRONT STREET, 4TH FL
P.O. BOX 003
TRENTON, NEW JERSEY 08625

PHIL MURPHY
Governor

SHEILA OLIVER
Lt. Governor

STEFANIE A. BRAND
Director

April 3, 2018

Via Overnight and Electronic Mail

The Honorable Rick Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
the.secretary@hq.doe.gov

Mr. Bruce Walker
Assistant Secretary, DOE Office of Elec. Delivery & Energy Reliability
Office of Electric Reliability and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
bruce.walker@hq.doe.gov

Ms. Catherine Jereza
Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585
catherine.jereza@hq.doe.gov

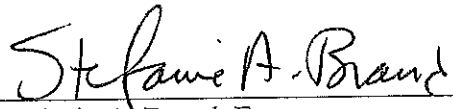
Re: Motion of New Jersey Division of Rate Counsel to Intervene

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

Attached is New Jersey Division of Rate Counsel's ("NJRC") Motion to Intervene in the proceeding concerning FirstEnergy Solutions Corp.'s ("FES") Request For Emergency Action Under Section 202(c) of the Federal Power Act. NJRC is the administrative agency charged under New Jersey Law with the general protection of the interests of utility ratepayers. *N.J.S.A.*

52:27E-50 *et seq.* NJRC is also a member of PJM Interconnection L.L.C., which will be affected by this FES request. NJRC opposes this FES request for emergency action. If this request is not denied outright, there should be a 60 day comment period, as requested by the Electric Power Supply Association *et al* on March 30, 2018.

Respectfully submitted, ,

A handwritten signature in black ink that reads "Stefanie A. Brand". The signature is written in a cursive, flowing style.

Stefanie A. Brand, Esq.
Director, New Jersey Division of Rate Counsel

UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY

Request for Emergency Order Pursuant)
To Federal Power Act Section 202(c) By)
FirstEnergy Solutions Corp.) DOE Docket No. _____

MOTION OF NEW JERSEY DIVISION OF RATE COUNSEL TO INTERVENE

The New Jersey Division of Rate Counsel (“NJRC”), by and through its counsel, hereby moves to intervene in the above-captioned proceeding and protests the March 29, 2018 Request for Emergency Order Pursuant to Federal Power Act Section 202(c) by FirstEnergy Solutions Corp. (“FES”), pursuant to Rules 211 and 214 of the Federal Energy Regulatory Commission’s (“Commission”) Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214.

I. PROCEDURAL BACKGROUND

On March 29, 2018, FES issued a request by letter (“Request”) to the Honorable Rick Perry, US Secretary of Energy, requesting that the Secretary use emergency authority under Federal Power Act Section 202(c) to find that an emergency condition exists in the PJM Interconnection L.L.C. (“PJM”) territory requiring immediate attention. In its Request, FES asks that the Secretary order “certain existing nuclear and coal-fired generators” to contract with PJM for energy, capacity and ancillary services to “maintain the stability of the electric grid.” FES also requests that the Secretary order PJM to “promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide.” The Request has been served on over 100 affected parties.

II. MOTION TO INTERVENE

NJ Rate Counsel is the administrative agency charged under New Jersey Law with the general protection of the interests of utility ratepayers. *N.J.S.A. 52:27E-50 et seq.* As the regulatory agency charged with protecting the utility ratepayers in the State of New Jersey, NJ Rate Counsel's participation is unique and in the public interest. Pursuant to C.F.R. §385.214(b)(2), NJ Rate Counsel is an "entity" within the meaning of Rule 214(b)(2) and NJRC accordingly moves for intervention.

If the FES Request is granted, cost responsibility for payments made pursuant to the Emergency Order may be recovered from consumers throughout the PJM region, including New Jersey. NJRC strongly opposes the Request and reserves the right to supplement this pleading to explain why it is unjust and unlawful.

NJ Rate Counsel will not be adequately represented by any other party to this proceeding, but may join with similarly situated entities. Good cause exists to grant this Motion to Intervene in this proceeding as NJ Rate Counsel represents NJ ratepayers directly affected by the FES request and is therefore a stakeholder in the outcome of the proceeding.

III. SERVICE OF DOCUMENTS

The following persons are designated by NJRC to receive service and communications on its behalf with regard to this proceeding:

Stefanie A. Brand, Esq.
Director, New Jersey Division of Rate Counsel
140 East Front Street
Trenton, NJ 08625
Phone: (609) 984-1460
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Email: sbrand@rpa.nj.gov

Brian Lipman, Litigation Manager
Henry M. Ogden, Esq.
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hogden@rpa.nj.gov
fthomas@rpa.nj.gov

IV. STATEMENT OF OPPOSITION

Rule 214(b)(1) requires the movant to state its preliminary position. NJRC opposes the relief sought by FES. The available evidence, not cited in the Request, demonstrates that no need exists for the requested relief and certainly no emergency exists that would justify application of Section 202(c) of the Federal Power Act.

NJRC respectfully urges the Department to give all interested parties sufficient time to present their responses to the FES Request before ruling on the Request. Accordingly, NJRC supports the March 30, 2018 filing by the Electric Power Supply Association and other organizations requesting a 60-day comment period.

V. CONCLUSION

For all the foregoing reasons, NJRC respectfully requests that the Department grant NJRC's motion to intervene in this proceeding, and, if the Department does not reject the FES Request outright, provide all interested parties 60 days to file comments on the Request.

Respectfully submitted,

NEW JERSEY DIVISION OF RATE COUNSEL

/s/ Stefanie A. Brand
Stefanie A. Brand, Esq.
Director, New Jersey Division of Rate Counsel
140 East Front Street
Trenton, NJ 08625
Phone: (609) 984-1460
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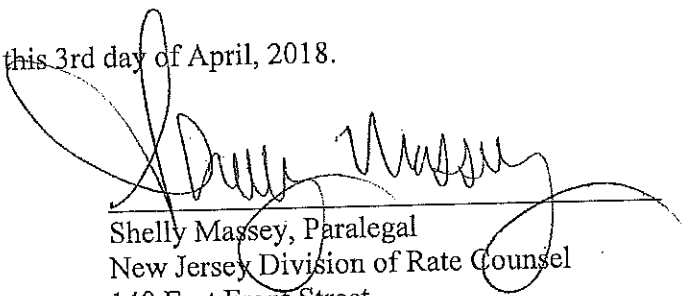
Brian Lipman, Litigation Manager
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fthomas@rpa.nj.gov

Counsel to the New Jersey Division of Rate Counsel
Dated: April 3, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have this day served, via overnight mail or electronic transmission the foregoing upon each person designated on the official service list compiled by the Secretary in this proceeding.

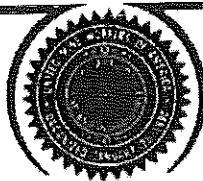
Dated at Trenton, NJ this 3rd day of April, 2018.



Shelly Massey, Paralegal
New Jersey Division of Rate Counsel
140 East Front Street
Trenton, NJ 08625
Phone: (609) 984-1460
Fax: (609) 292-2923
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United Mine Workers of America

CECIL E. ROBERTS
INTERNATIONAL PRESIDENT



TELEPHONE
(703) 291-2420
FAX (703) 291-2451

Document 102

UNITED MINE WORKERS' HEADQUARTERS
18354 QUANTICO GATEWAY DRIVE, SUITE 200

Triangle, VA

22172-1779

April 17, 2018

The Honorable Rick Perry
Secretary
U.S. Department of Energy
1000 Independence Avenue
Washington, DC 20585-1000

Via E-Mail Transmission to AskOE@hq.doe.gov

Re: Section 202(c) Relief for Baseload Power Plants

Dear Secretary Perry:

I am writing on behalf of the active and retired members of the United Mine Workers of America. The livelihoods of UMW members, their families, and their communities are critically dependent upon preserving and protecting the economic viability of the nation's fleet of coal-based power plants. These plants are subject to unfair competition from subsidized energy sources and market rules that do not value their unique benefits to the reliability and resiliency of the nation's electric power grid.

We supported your proposed Grid Resiliency Pricing Rule, and were disappointed that FERC rejected the rule in favor of pursuing a "holistic" assessment of the multiple challenges to electric reliability and resiliency posed by extreme weather events, terrorist acts, unfair regulatory pricing regimes, and other factors. We do not believe that this study, and any related FERC action, can be undertaken in a time frame that will provide meaningful relief from the unending stream of announced baseload plant closures. FERC indicates that some 26,000 Megawatts of coal and nuclear baseload is expected to close within just the next two years.

The recently announced FirstEnergy Solutions bankruptcy - presaging the near-term closures of six large coal and nuclear facilities serving the Midwest and Mid-Atlantic regions - makes clear the urgency of these threats to national energy security, and to the welfare of thousands of workers and their communities.

UMWA respectfully suggests a two-prong approach to address the current and pending threats to electric reliability and resiliency posed by the ever-increasing share of electric generation provided by subsidized intermittent renewable resources and natural gas plants subject - to a large degree - to interruptible gas supplies.

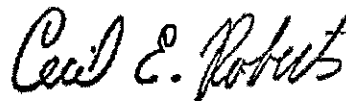
First, we believe that it is timely and appropriate for you to exercise your authority under Section 202(c) to provide immediate relief for the coal and nuclear baseload facilities that are at risk due to the FirstEnergy Solutions bankruptcy. Just one of these plants - the relatively new Pleasants generating station in West Virginia, supports 27% of the local tax base while providing highly-paid jobs to hundreds of workers in the utility, coal mining, and transportation sectors. The recent NETL analysis of the Bomb Cyclone event documents the vital role of baseload generation such as Pleasants and the other bankrupted FirstEnergy Solutions plants in avoiding a catastrophic collapse of the eastern grid.

Second, with respect to the much larger number of coal and nuclear baseload facilities operating in "competitive" markets, we recommend that DOE consider the application of other authorities available to the Department to help minimize the ongoing premature retirement of this capacity. At the same time, DOE should support, through its own modeling capabilities, an accelerated, action-oriented conclusion to FERC's holistic analysis of reliability and resiliency.

We suggest this bifurcated approach because a more limited, targeted exercise of 202(c) authority is consistent with the regulatory history of this provision, while the immediate nature of the risks to the eastern electric grid posed by the FirstEnergy Solutions bankruptcy cannot be addressed in a timely manner by the FERC process.

Thank you for your consideration of UMWA's views. I would be happy to discuss them further with you at any time.

Sincerely,



Cecil E. Roberts

April 10, 2018

Honorable Rick Perry, Secretary
Department of Energy
1000 Independence Ave. SW
Washington, DC 20585

Dear Secretary Perry

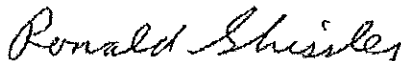
(b) (6) I am writing to ask that you reject FirstEnergy's subsidiary First Energy Solution's (FES) request under section 202(c) of the Federal Power Act for a declaration of emergency. Our situation is not an emergency. As PJM has made clear: "Nothing we have seen to date indicates that an emergency would result from the [FirstEnergy] generator retirements."

As one who endorses a free-market economy, we know such inventions would be wrong and counterproductive. Granting FirstEnergy's request would be very disruptive to competitive markets and on that basis alone should be rejected.

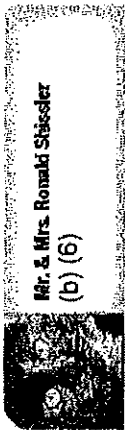
FirstEnergy has a long track record of bad management decisions that have resulted in its ratepayers having to pay some of the highest electricity rates in the country. To grant this request would be another ratepayer bailout for bad management. Beginning in the 1970s with the decision to build 9 nuclear units, FirstEnergy management has made a series of bad decisions. The mismanagement of the construction of the Perry I and Beaver Valley II nuclear units resulted in \$9 billion in cost overruns. Most of these costs were passed on to ratepayers in the 1980s even though these units represented excess capacity in the FirstEnergy generation portfolio. Only high rates and billions of dollars in "stranded cost" recovery in the form of a "competitive transition charge" have likely kept First Energy Solutions from declaring bankruptcy a long time ago.

Additionally, FirstEnergy has used a second phony argument for claiming it deserves a bailout. It claims it is not receiving sufficient compensation for the "unique benefits" that its nuclear units provide. FirstEnergy has been attempting to get the Ohio and Pennsylvania legislatures to give it a bailout in the form of "Zero Emissions Credits", another ratepayer charge. However, despite the myth that nuclear plants are a clean source of energy, the fact is they routinely vent some of the deadliest gases known to exist. And, the process to make commercial grade fuel for nuclear plants contributes to Climate Change.

Mr. Secretary, enough is enough. I urge you to do the right thing on behalf of the millions of ratepayers, not only in the FirstEnergy service territory, but throughout the PJM Interconnection: put an end to this history of gouging ratepayers to cover inept management.



Ronald Shissler
(b) (6)



Received

APR 18 2018

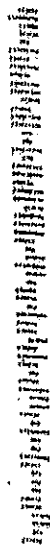
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Honorable Rick Perry, Secretary
Dept. of Energy
1000 Independence Ave, SW
Washington, D.C. 20585

20585-



From: Gene Grace
To: [AskOE](#)
Cc: [Tom Vinson](#); [Betsy R. Beck](#)
Subject: AWEA's Comment on Section 202(c) of the FPA
Date: Thursday, April 19, 2018 2:49:24 PM
Attachments: [image001.jpg](#)
[AWEA comments on Section 202\(c\).pdf](#)

Please find attached AWEA's comments on section 202(c) of the FPA.



Gene Grace
Senior Counsel
American Wind Energy Association

ggrace@awea.org email
202.383.2529 direct
(b) (6) cell

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April 19, 2018

Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: Comments of the American Wind Energy Association on the Request for Input on the Process for Considering Applications under section 202(c) of the Federal Power Act and the March 29, 2018 Request of First Energy Solutions for an Emergency Order Thereunder

Submitted via: AskOE@hq.doe.gov

The American Wind Energy Association (“AWEA”) hereby respectfully submits these comments in response to the Department of Energy’s (“DOE”) request for input on the process for consideration of applications under section 202(c) of the Federal Power Act (“FPA”) by the Secretary of Energy.¹ AWEA’s comments largely respond to the March 29 “emergency order” application made by FirstEnergy Solutions, on behalf of certain of its subsidiaries (collectively, FirstEnergy),² requesting that the Secretary of Energy require PJM Interconnection and, by extension, electricity consumers in the PJM region, to provide “full cost recovery” for certain merchant generating plants in its footprint. The request should be rejected as FirstEnergy has neither demonstrated the existence of an emergency that would support action by Secretary of Energy under Federal Power section 202(c), nor shown that its requested relief is reasonable under that section of the FPA or any other thereunder.

¹ 16 U.S.C. § 824a(c) (2017).

² A day prior to the request, FirstEnergy Solutions filed notice with PJM that three of the company’s nuclear power plants would be deactivated or sold during the next three years. On March 31 FirstEnergy Solutions, its subsidiaries and FirstEnergy Nuclear Operating Company filed voluntary petitions under Chapter 11 of the Federal Bankruptcy Code with the U.S. Bankruptcy Court in the Northern District of Ohio in Akron.

I. Process for Considering 202(c) Applications: Should Only be Used to Address Imminent Emergencies

At this time, AWEA does not offer detailed comments on a generic process under which 202(c) applications should be addressed. However, in general, we think that DOE should consider such applications in a transparent manner—providing notice to all interest stakeholders of the application. In addition, to the fullest extent possible, DOE should seek comment from interested stakeholders before taking action on a specific application; if an emergency situation exists that does not afford time for comment prior to taking action on an application, DOE should strive to seek comment thereon immediately after taking action.

Section 202(c) is expressly limited to “emergencies” or other “sudden” events, and DOE acknowledges on its own website that it only enables the agency to impose temporary measures due to an “emergency” or other “sudden” circumstance.³ Since section 202(c) provides a narrow and limited mechanism for the Secretary “to require temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy” during emergencies, it should only be used in circumstances that truly meet that standard. While section 202(c) does not define either “emergency” or “sudden,” the dictionary definitions of these words reinforce that they mean an imminent crisis that is often unexpected.⁴ Accordingly, any order issued under section 202(c) should, consistent with the statutory mandate and implementing regulations, be a

³ DOE’s Use of Federal Power Act Emergency Authority,” available at <https://www.energy.gov/oe/services/electricity-policy-coordination-and-implementation/other-regulatory-efforts/does-use>.

⁴ See “Emergency,” BLACK’S LAW DICTIONARY 2d Ed., <https://thelawdictionary.org/emergency/> (“Situation requiring immediate attention and remedial action. Involves injury, loss of life, damage to property, or catastrophic interference with the [sic] normal activities. A sudden, unexpected, or impending situation”); “Sudden,” OXFORD ENGLISH DICTIONARY ONLINE, <https://en.oxforddictionaries.com/definition/sudden> (“Occurring or done quickly and unexpectedly or without warning.”).

current or imminent emergency and the order should be temporary in nature—although it should be able to be extended if an emergency continues.

The Secretary should summarily dismiss applications for an emergency order if the evidence does not support a finding that the emergency is present or imminent. Neither section 202(c) nor the DOE's implementing regulations contemplate broad, protracted intervention in wholesale energy markets. As discussed further below, the Secretary's emergency authority simply cannot be invoked based on claims that plant retirement trends and over-reliance on a particular type of generation may pose reliability challenges some years in the future.

II. FirstEnergy's 202(c) Application

FirstEnergy has not demonstrated the existence of an emergency within the meaning of section 202(c) and, therefore, the Secretary of Energy should reject the request.

The crux of FirstEnergy's claim is that an emergency exists because of the retirement of merchant coal and nuclear plants that it alleges are necessary for the reliable and resilient operation of the grid in the PJM region, which would otherwise be overly dependent on other forms of generation that lack fuel security. FirstEnergy asserts that the Federal Energy Regulatory Commission ("FERC") and PJM have not done enough to prevent coal and nuclear plant retirements, arguing, among other things, that PJM markets do not adequately compensate the claimed reliability and resiliency benefits of traditional baseload units with onsite fuel supplies.

FirstEnergy's general claims concerning the potential adverse impacts of coal and nuclear plant retirements in PJM do not establish the existence of an emergency within the meaning of section 202(c), let alone one that would justify imposing cost of-service payments for merchant

plants on consumers in PJM for at least a four-year period. FirstEnergy's claimed "emergency" is, at the end of the day, based on economics.

FirstEnergy contends that merchant coal-fired and nuclear plants in PJM are inadequately compensated for the reliability and resilience benefits they provide. DOE's regulations specifically state, however, that "[s]ituations where a shortage of electric energy is projected due solely to the failure of parties to agree to terms, conditions or other economic factors relating to service, generally will not be considered as emergencies unless the inability to supply electric service is imminent."⁵ Moreover, section 202(c) unambiguously requires that any compensation required by the Secretary be "just and reasonable,"⁶ and an unjustified out-of-market subsidy to one class of resources would certainly not meet that test.

For the sake of argument, even if there is a threat, it is certainly not imminent. The request by FirstEnergy cites plant retirements that may occur in the next several years, which does not demonstrate an "imminent" inability to supply electric service in PJM that could possibly justify characterizing the situation in PJM as an "emergency" within the meaning of section 202(c). For example, the nuclear facility closures upon which FirstEnergy primarily relies are scheduled to retire 2-3 years from now.⁷ In addition, FirstEnergy cites facilities that may retire—a mere possibility does not rise to an imminent crisis.⁸ There is simply no "emergency" or "sudden" event requiring a handout to coal and nuclear generation.

⁵ 10 C.F.R. § 371 (2017).

⁶ 16 U.S.C. § 824a(c) (2012).

⁷ FirstEnergy at 8, 20 (noting that Davis-Besse, Perry, and Beaver Valley are scheduled to retire in 2020 or 2021).

⁸ *Id.* at 21 (noting that units at the W.H. Sammis coal-fired plant "are in danger of being closed.")

In a March 30, 2018 letter to the Secretary of Energy, PJM responded to FirstEnergy's request. PJM stated without reservation that there is no immediate threat to system reliability. It also emphasized that plant retirements in the region are subject to review by PJM, which has "a range of tools available" to address any identified resource adequacy or reliability problems associated with plant retirements, including "offering full cost of service compensation . . . to induce assets to remain temporarily online." As also noted by PJM:

PJM does not believe that operating outside of the market to preserve a particular class or type of generation is needed at this time for reliability. The markets have been resilient in attracting new investment. In addition, a variety of tools exist as a backstop should specific generation be needed in a particular area.⁹

In addition, PJM's press statement comprehensively rebutted FirstEnergy's claims:

This is not an issue of reliability. There is no immediate emergency. Diversity of the fuel supply is important, but the PJM system has adequate power supplies and healthy reserves in operation today, and resources are more diverse than they have ever been. Nothing we have seen to date indicates that an emergency would result from the generator retirements. The potential for the retirements has been discussed publicly for some time. In anticipation, PJM took a preliminary look at the effect of the retirements on the system. We found that the system would remain reliable. We have adequate amounts of generation available.¹⁰

The purported problem prompting the March 29 Request is also the same one that was the subject of the Secretary's October 10 NOPR.¹¹ FERC already considered these same arguments in the proposed grid resilience pricing rule.¹² Indeed, the identical arguments

⁹ U.S. Sen. Comm. on Energy and Nat. Res., The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 1 from Sen. Lisa Murkowski (Jan. 23, 2018).

¹⁰ Available at <https://www.rtoinsider.com/pjm-ferc-resilience-rick-perry-first-energy-89464/>.

¹¹ See *Grid Resilience Pricing Rule*, Notice of Proposed Rulemaking, 82 Fed. Reg. 46,940 (Oct. 10, 2017) ("October 10 NOPR").

¹² *Reliability and Resilience Pricing, Order Terminating Rulemaking Proceeding, Initiating New*

FirstEnergy raises in its request were largely rejected by FERC in response to Secretary Perry's proposed grid resiliency pricing rule.¹³

In dismissing that proposal, FERC found that requiring full cost recovery for fuel-secure merchant generating facilities was not justified. While the January 8 Order noted that FirstEnergy and other commenters alleged grid resilience or reliability issues due to potential retirements of particular resources, FERC found “that these assertions do not demonstrate the unjustness or unreasonableness of the existing RTO/ISO tariffs.”¹⁴ Instead, FERC held that none of the participants in the rulemaking, including FirstEnergy (which filed extensive comments), had demonstrated that existing tariffs were unjust and unreasonable or that the proposed cost-based rates for select generators were just and reasonable.¹⁵ In reaching this conclusion, FERC relied on “extensive comments” from PJM and other system operators which identified no “past or planned generator retirements that may be a threat to grid resilience.”¹⁶ FirstEnergy is now asking the Secretary to second-guess FERC's expert findings on a record that was fully developed.

To justify its request, FirstEnergy relies primarily on a recently released National Energy Technology Laboratory report (“NETL Report”) that incorrectly concludes that power plants with onsite fuel were critical to preserving “resiliency” during the “Bomb Cyclone” in late

Proceeding, and Establishing Additional Procedures, 162 FERC ¶ 61,012 (Jan. 8, 2018) (“January 8 Order”).

¹³ *Id.*

¹⁴ January 8 Order at P 1.

¹⁵ *See id.* at PP 14-16.

¹⁶ *Id.* at P 15.

December to early January.¹⁷ The NETL Report departs from the majority of studies on the subject. This departure is primarily due to an erroneous conclusion in the report: since coal generation increased more in comparison to other forms of generation during stressful winter events, it was assumed as a sign that coal provided resiliency. The actual explanation is far simpler: there are many coal units that are rarely used due to their high-cost, and thus those coal plants are only used when demand and electricity prices are far higher than usual.¹⁸ PJM's analysis of its systems performance during that weather event undermines FirstEnergy's claims about the importance of onsite fuel. Most generator failures during the "Bomb Cyclone" event were due to equipment failures, not a lack of onsite fuel, so coal plants experienced a failure rate comparable to that of other energy sources.¹⁹ Further, many types of generators far outperform coal and nuclear generators in their capability to provide essential grid reliability services like flexibility, frequency regulation, and primary frequency response, as noted in a PJM chart included in DOE's August 2017 Staff Report.²⁰

DOE's Staff Report also contradicts FirstEnergy's claim that there is an emergency threat of generation shortages, noting that "All regions have reserve margins above resource adequacy

¹⁷ FirstEnergy Request at 3-8, citing National Energy Technology Laboratory, Reliability, Resilience, and the Coming Wave of Retiring Baseload Units Volume I: The Critical Role of Thermal Units During Extreme Weather Events (Mar. 13, 2018) ("NETL Report"), available at <https://www.netl.doe.gov/research/energy-analysis/search-publications/vuedetails?id=2594>.

¹⁸ Michael Goggin, Fossil Lab Misses Mark in Cold Weather "Resilience" Report, (Mar. 28, 2018), available at <http://sustainableferc.org/fossil-lab-misses-mark-in-cold-weather-resilience-report/>.

¹⁹ PJM Interconnection, PJM Cold Snap Performance Dec. 28, 2017 to Jan. 7, 2018 (Feb. 26, 2018), available at <http://www.pjm.com/-/media/library/reports-notice/weather-related/20180226-january-2018-cold-weather-event-report.ashx>, at 19, 21.

²⁰ Available at https://www.energy.gov/sites/prod/files/2017/08/f36/Staff%20Report%20on%20Electricity%20Markets%20and%20Reliability_0.pdf at 86.

targets.”²¹ This was affirmed by NERC’s testimony to FERC that “the state of reliability in North America remains strong, and the trend line shows continuing improvement year over year,”²² as well as FERC staff analysis.²³ More recent NERC analysis indicates that reserve margins in PJM over the next several years will be around 30 percent, nearly twice the target level of 16.6 percent, and could go as high as 60 percent if planned generation additions materialize.²⁴ PJM’s own analysis has demonstrated that once reserve margins exceed 20 percent, the marginal benefit of additional reserve capacity for reducing customer outages is negligible.²⁵

Moreover, generation shortfalls account for a small fraction of customer electricity outages, with the vast majority caused by transmission and distribution system failures during extreme weather. The Rhodium Group found that generation inadequacy accounted for less than 1/10,000th of all customer-hours of outages, with fuel supply emergencies an even smaller share at fewer than 1 in 1.4 million.²⁶ Similarly, analysis in Public Utilities Fortnightly found that “distribution system outages appear to impose roughly two orders of magnitude more minutes of outage on customers than does resource adequacy . . . 146 compared to 1.2 minutes a year.”²⁷

²¹ *Ibid.*, at 66

²² Available at <https://www.ferc.gov/CalendarFiles/20170717080645-Cauley,%20NERC.pdf>.

²³ Available at <https://www.ferc.gov/market-oversight/reports-analyses/mkt-views/2017/10-19-17-A-3.pdf>.

²⁴ Available at https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_12132017_Final.pdf, page 10.

²⁵ Available at <http://www.pjm.com/~media/committees-groups/subcommittees/raas/20160927/20160927-2016-pjm-reserve-requirement-study.ashx>, page 39.

²⁶ Available at <https://rhg.com/research/the-real-electricity-reliability-crisis-doe-nopr/>.

²⁷ Available at <https://www.fortnightly.com/fortnightly/2010/04/reconsidering-resource-adequacy-part-1>.

Allocating finite ratepayer money to subsidizing uneconomic and unneeded generation rather than strengthening congested and antiquated transmission and distribution infrastructure will only harm reliability and resilience.

FirstEnergy is seeking out-of-market profit guarantees for an entire class of resources throughout PJM's territory. As such, the request would impair competitive wholesale markets, not only undermining a policy meant to protect consumers but also the investment decisions made throughout the energy sector. FERC has prudently instituted proceedings to further analyze and address the issues raised by the Secretary of Energy's proposed rule (considering whether pro-competitive market solutions are warranted), and those proceedings are ongoing and should not be undermined. FirstEnergy is clearly attempting to sidestep the involvement of interested stakeholders and the ability of FERC to consider matters that are rightfully within its jurisdiction and consider solutions, if warranted, consistent with its statutory mandate.²⁸ It would be inappropriate to allow FirstEnergy to seek essentially the same relief from the Secretary of Energy that FERC, applying its exclusive jurisdiction over the rates, terms, and conditions of wholesale sales of electricity, found to be unjustified.

III. Conclusion

For the foregoing reasons, AWEA strongly disputes the notion that drastic intervention in the markets using the Secretary's FPA section 202(c) emergency authority, or any other section

²⁸ Of note, FirstEnergy did not seek rehearing of FERC's January 8 Order.

under the FPA, is an appropriate solution to the concerns raised in FirstEnergy's application and respectfully requests that the Secretary deny FirstEnergy's request for an emergency order.

Sincerely,

/s/ Gene Grace

Gene Grace
Senior Counsel

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Michael Goggin

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cc: Bruce J. Walker, Assistant Secretary, DOE Office of Electric
Delivery & Energy Reliability
Patricia A. Hoffman, Principal Deputy Assistant Secretary,
DOE Office of Electric Delivery & Energy Reliability
The Honorable Kevin J. McIntyre, Chairman, FERC
The Honorable Cheryl A. LaFleur, Commissioner, FERC
The Honorable Neil Chatterjee, Commissioner, FERC
The Honorable Robert F. Powelson, Commissioner, FERC
The Honorable Richard Glick, Commissioner, FERC

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CONGRESSIONAL HEARING HEALTH CAUCUS
CO-CHAIR,
CONGRESSIONAL PENSION PROTECTION CAUCUS

April 19, 2018

Secretary Rick Perry
U.S. Department of Energy
1000 Independence Ave. SW
Washington, DC 20585

Dear Secretary Perry,

The Energy and Commerce Committee has held numerous hearings over the past four years to examine all aspects of how American electricity is generated and priced into the competitive markets. After hearing testimony from industry experts and government officials, we are no closer to solving the complex question of how to provide a secure and resilient grid. We know recent severe weather along with cyber and physical threats, pose enormous challenges to grid reliability and resilience. The American consumer should not have to worry about the next cold weather event or cyber-attack.

I believe it is time for you to invoke his authority under Section 202(c) of the Federal Power Act or any other emergency authority the President or Secretary of Energy may have. We believe 202c or the Defense Production Act are appropriate mechanisms to protect the grid. The law gives authority to the Secretary when emergency conditions exist such as a shortage of electricity due to various reasons. The law also states, "or other causes" that threaten the availability of electricity. I believe there are important "other causes" which haven't adequately been addressed by FERC and the ISO's and RTO's.

Our electrical generation system and grid are changing very quickly, as these changes evolve we need to make sure these changes do not have unintended consequences. The rapid rise of natural gas electrical generation has proven to be a fantastic asset and something I will continue to support. However, as quickly as this resource develops, I'm afraid we are overlooking the potential downside associated with being too reliant on one fuel source. Especially a fuel that is dependent upon pipeline infrastructure that many states refuse to allow to be built.

In testimony on January 18th of this year, before the Senate Energy and Natural Resources Committee, Gordon van Welie, President and CEO of ISO New England stated, "we've known for several years that when it gets cold New England does not have sufficient natural gas supply

infrastructure to meet demand for both home heating and power generation". Now is the time for this administration to act.

There are three very good reasons to invoke emergency measures. America faces an immediate national security threat of a cyber-attack focused on our electric generation industry and energy delivery systems. Our coal and nuclear fleets provides the resource capacity cushion needed to mitigate a potential attack, and a secure fuel source in case a cyber threat is successful. Prematurely retiring these plants would be detrimental to our fuel security. This alone, is reason enough to invoke emergency measures. Second, the wholesale electricity markets are broken and have failed to mitigate the market distorting effects of tax subsidies and renewable fuel mandates implemented by states. Finally, it is the proper role of the Secretary of Energy to implement lawful policies to protect our grid and to protect the economic wellbeing of all Americans.

America faces a national security threat of a cyber-attack focused on our electric generation industry and energy delivery systems. Two years ago, our office hosted a cyber security seminar in Fairmont, WV. One industry expert who spoke was Joe McClelland who is FERC's cyber security expert. In subsequent meetings with my staff, Mr. McClelland discussed unclassified information about ongoing cyber-attacks on our pipelines.

Just last week an article outlines recent attacks on energy infrastructure. Additionally, "last month, investigators at the Department of Homeland Security and FBI warned energy companies of a year's long Russian hacking campaign that also targeted firms in the nuclear" industry. Pipeline compressor stations are prime targets. A successful attack on one compressor station can affect several natural gas power plants and grid reliability and resilience. Out of an abundance of caution, Secretary Perry should use 202c in *his judgment to best meet this immediate emergency and serve the public interest*. Prematurely retiring coal and nuclear plants would be detrimental to our fuel security needs.

In testimony before this committee we also heard from industry and government experts on the national security aspects of our nuclear power industry. A strong commercial nuclear industry is critical. Three nuclear industry components are intertwined with each other. The United States' nuclear weapons program, the Navy's nuclear propulsion program and reactors, and the nation's commercial nuclear industry. We heard from one witness who said, "The ability of the US to lead in nuclear safety, security and nonproliferation efforts is significantly lessened as commercial activity erodes".

Finally, in a March 2018 CRS Report on physical grid security, they state, "it has not necessarily reached the level of physical security needed based on the sector's own assessments of risk. Bulk power physical security remains a work in progress."

The wholesale electricity markets are broken and have failed to mitigate the market distorting effects of tax subsidies and renewable fuel mandates implemented by states. Dozens of witnesses have testified, hundreds of studies and millions of articles have been written about the market distorting features of our tax code. We have also heard from the ISO's and RTO's saying, "the markets are working", while ignoring the impact of these subsidies and tax policies have on the wholesale electricity market. It seems the only competition that is relevant in their minds is natural gas versus coal, the playing field is not level.

Just this week before our Committee FERC Chairman McIntyre said we do not have a free market and state policies have distorted pricing.

On a per-megawatt-hour basis, in FY 2013 solar received \$231 of support and wind received \$35, while natural gas and petroleum received 67 *cents* and coal received 57 *cents*, a factor of 405 times to one! And we are to believe this is a fair market? From a witness before this committee, *"Artificially promoting the development of wind and solar actually raises the true cost of electricity generation, because it is currently much cheaper to produce electricity (all things considered) through coal and natural gas plants, rather than new wind and solar"*.

PJM acknowledged the short comings of their market and the distorting effects of subsidies by filing with FERC a plan to properly compensate base load power generators for the value they provide to the market. "Left unaddressed the subsidies will crowd out efficient, competitive resources.... we seek the appropriate balance that respects state policy while avoiding policy impacts of a state's subsidies on the market as a whole and on other states."

Critics say that invoking 202c is a bailout for the coal industry. This is not correct. The reason coal is at an economic disadvantage is due to conscious policy decisions made by Congress and state legislatures around the country. These politicians have distorted the market to such an extent that secretary Perry correctly stated, "We don't have a free market in that industry and I'm not sure you want one." Temporarily invoking 202c will give the markets and regulators the time needed to correct their policy decisions. A policy where all fuel sources are treated fairly and valued for the security they bring is the outcome we seek.

It is the proper role of the Secretary of Energy and President Trump to implement lawful policies to protect our grid and to protect the economic wellbeing of all Americans. Congress also has a role in asking for policies to be implemented. In this regard, 23 members of Congress signed a bipartisan letter to President Trump asking that 202c be invoked. A second bipartisan letter with four additional members of the House "urge immediate action" by the President to keep Ohio's only two nuclear plants open.

In a time where it is the policy of this administration to achieve energy dominance, Americans had to worry about their lights staying on during the recent Cyclone Bomb weather event. In addition, American's had to import Russian LNG just to make sure they remained warm during a

relatively minor weather event. We were put into this situation by the shortsighted policies by New England politicians. What happens the next time?

In January of this year, ISO New England published a report detailing the crisis they face.

- ***Fuel-security risk—the possibility that power plants won't have or be able to get the fuel they need to run, particularly in winter—is the foremost challenge to a reliable power grid in New England.***
- ***The region is vulnerable to the season-long outage of any of several major energy facilities***

ISO-New England recently asked FERC to keep Exelon's Mystic Generating station online, saying their retirement could put electricity reliability at risk. The early retirement of units 8 and 9 at the plant would pose an "unacceptable fuel security risk to the region during the winter months," ISO-NE said in a memo. We cannot agree more. The same should be done nationwide.

The shortsighted renewable policies implemented by some states has led to 73 gigawatts of electricity being imported from Canada, equivalent of 70-120 power plants. Each of the power plants replaced by the Canadian power were an economic driver in their communities. Each plant provided essential tax revenue to support the local government and services. In my state, one such plant provides 30% of the local tax revenue. If this plant is closed due to unfair competition and bad policy decisions made on the national level, it will threaten hundreds of West Virginian's economic security.

Conclusion

I urge you to exercise the powers granted to you via section 202c for a temporary two-year period. This will allow the markets and policy makers the time needed to come up with a correct and fair solution addressing national security and past bad policy. Once we prematurely retire nuclear and coal fired plants we potentially put our economy in jeopardy. Once a plant closes it will not come back. A time out during this rapidly changing time, is a wise thing to do.

We have been warned about potential problems on the immediate horizon, but because of our polarizing politics our institutions have been unable to respond to the challenge. There were those who said the Titanic was unsinkable, experts after the fact said we were not creative enough to imagine 911, now we should not foolishly put our grid at risk. Please invoke 202c to help all Americans.

Sincerely,


David B. McKinley, P.E.
Member of Congress
DBM/lh

From: Local Ibew 246
To: AskOE
Subject: Federal Power Act 202(c)
Date: Thursday, April 19, 2018 2:27:38 PM
Attachments: [IBEW LU 246 comments to FERC.pdf](#)

Dear Members of the Committee:

I have attached my previous comment letter of October 16, 2017 concerning base load generation to support the resiliency of the nations power grid.

I would like to reiterate my request to support the continued operation and financial support of the existing operating coal and nuclear power generation facilities. Should this unprecedented period of low gas prices disappear within the next decade the security of our nation and the financial security of our homes and communities will face irreparable harm should one industry have a monopoly on our power supply. What will we, the consumer, do when this occurs?

Thank you for your consideration of these comments and I urge you to issue an emergency order pursuant to the Federal Power Act Section 202(c) before it is too late to save our base load reserve.

Very sincerely yours,

Kyle N. Brown
Business Manager
740-282-7572 office
740-282-4425 fax
union@ibew246.com

International Brotherhood of Electrical Workers

Local Union No. 246 • Established April 4, 1902

Telephone (740) 282-7572

Fax (740) 282-4425



P.O. Box 188
626 N. Fourth Street
Steubenville, Ohio 43952



October 16, 2017

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

Re: Grid Resiliency Pricing Rule
FERC Docket No. RM18-1-000

COMMENTS OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS, LOCAL UNION 246 (IBEW LU 246) IN SUPPORT OF THE PROPOSED RESILIENCY RULE

On September 28, 2017, the Department of Energy ("DOE") issued the "Grid Resiliency Pricing Rule" (the "Proposal") directing the Federal Energy Regulatory Commission ("FERC") to adopt a rule requiring operators of organized markets to "ensure that certain reliability and resiliency attributes of electric generation sources are fully valued." Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in Ohio will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

IBEW LU 246 strongly supports the Proposal and shares the Secretary's urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members' loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of

crucial power plants needed for reliability for some time. FERC has the requisite basis to act now. There is no time for delay. In addition to acting promptly, FERC should also direct organized market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Kyle N. Brown
Business Manager
IBEW LU 246
626 North Fourth St., Steubenville, OH 43952
(740) 282-7572
union@ibew246.com

II. DESCRIPTION OF IBEW Local 246

We are a labor organization, representing over two hundred and fifty skilled electricians and their families in the Upper Ohio Valley.

III. DESCRIPTION OF IBEW LU 246'S INTEREST IN PROCEEDING

IBEW LU 246 is a party to a collective bargaining agreement with the National Electrical Contractors Association, Steubenville Division, who service baseload coal and nuclear power plants located in Ohio and West Virginia. Our members work on major infrastructure and industrial development projects that are dependent on the continued operation of the baseload coal and nuclear power plants. As a result, the wages, terms and conditions of employment of its members may be directly affected by the actions taken by the FERC and operators of organized markets in

this proceeding. Thus, IBEW LU 246 members have a direct and substantial interest in this proceeding. As well, the unique perspective of IBEW LU 246 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in Ohio electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across Ohio. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in Ohio provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to IBEW LU 246 members. The First Energy, W.H. Sammis Plant and the American Electric Power, Cardinal Plant directly employs approximately one thousand people, and the maintenance and capital improvement work on these plants supports the local economy by creating well-paying union jobs. In addition, the plants contribute millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services. IBEW LU 246 provides over one hundred construction and maintenance workers servicing these facilities. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive

economy in two ways. First, the preservation of certain plants will avoid the need to replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed, reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled Electricians, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

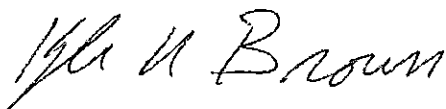
Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in Ohio, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, IBEW LU 246 strongly urges FERC to adopt the rule proposed by the DOE as promptly and

comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by the comments considered in this proceeding. FERC has thoroughly considered the impact of electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of pre-mature closures.

In acting promptly, FERC should also direct the organized market operators to issue a rule that is not only compensatory, but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

Respectfully submitted,

A handwritten signature in black ink, reading "Kyle N. Brown". The signature is written in a cursive, flowing style.

Kyle N. Brown
Business Manager
IBEW Local Union 246

From: Warden, Vickie
To: AskOE
Cc: kimberly.bose@ferc.gov; nathaniel.davis.ferc.gov; giannanr@firstenergycorp.com; edean@firstenergycorp.com; mparke@firstenergycorp.com; mendenhallk@firstenergy.com; mrhenry@firstenergycorp.com; snoewer@firstenergycorp.com; wscherman@gibsondunn.com; jakubiak@gibsondunn.com; jmansh@gibsondunn.com; csmith@gibsondunn.com; matthew.hartigan@state.de.us; PSC_FERC@state.de.us; joseph.delosa@state.de.us; andrea.maucher@state.de.us; andrew.slater@state.de.us; morris.schreim@maryland.gov; miles.mitchell@maryland.gov; ransom.davis@maryland.gov; cynthia.holland@bpu.nj.gov; douglas.dickinson@bpu.nj.gov; zainab.nawaz@bpu.nj.gov; timothy.oberleiton@law.njoag.gov; carolyn.mcintosh@law.njoag.gov; alex.moreau@law.njoag.gov; kjones@ncuc.net; debra.gebolys@puco.ohio.gov; daniel.shields@occ.ohio.gov; kevin.moore@occ.ohio.gov; jamullins@pa.gov; imelia@pa.gov; ematheson@pa.gov; rshort@psc.state.wv.us; clipscombe@psc.dc.gov; cberry@psc.dc.gov; nshelley@psc.dc.gov; bedmonds@psc.dc.gov; dcleverdon@psc.dc.gov; ghu@psc.dc.gov; fwest@psc.dc.gov; craig.glazer@pj.com; steven.pincus@pjm.com; vincent.duane@pjm.com; jennifer.tribulski@pjm.com; tim.fryfogle@rfirst.org; leslie.krawczyk@rfirst.org; jhaney@firstenergycorp.com; wetstone@acore.org; mwoolf@aee.net; jerry.schwartz@afandpa.org; snitchlert@apl.org; afarrell@aweaa.org; jhughes@elcon.org; nancyb@epsa.org; sginsberg@ipaa.org; jdreskin@ingaa.org; piagtiani@ngsa.org; ahopper@seia.org; mprice@jenner.com; bweishaar@mcneeseaw.com; sbruce@mcneeseaw.com; kstark@mcneeseaw.com; mgarber@mcneeseaw.com; dbushnell@mcneeseaw.com; mpattwell@clarkhill.com; rstrong@clarkhill.com; rwilliamson@clarkhill.com; bdodd@lewis-kappes.com; kenneth.carretta@pseg.com; jmcaster@amppartners.org; krothey@amppartners.org; cnorton@amppartners.org; kmunsch@citizensutilityboard.org; edebellis@citizensutilityboard.org; andrew.slater@state.de.us; ruth.price@state.de.us; regina.loril@state.de.us; leonard.collins@state.de.us; sbrand@rpa.nj.gov; blipman@rpa.nj.gov; hogden@rpa.nj.gov; fthomas@rpa.nj.gov; jroberts@cad.state.wv.us; smfrye@opc-dc.gov; fheinle@opc-dc.gov; ahenderson@opc-dc.gov; ymariam@opc-dc.gov; william.fields@maryland.gov; mpanfil@edf.org; dmunson@edf.org; kkennedy@nrdc.org; jchen@nrdc.org; ggianetti@nrdc.org; jmoore@nrdc.org; devrard@paoca.org; aford@odec.com; mcocco@odec.com; aclair@thompsoncoburn.com; rshelton@thompsoncoburn.com; dpatterson@publicpower.org; jmcaffrey@publicpower.org; ecaplan@publicpower.org; wilkieb@coned.com; comesm@coned.com; oboyleb@coned.com; vui@coned.com; sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; twilliams@duqlight.com; cdomian@duqlight.com; jpeoples@duqlight.com; rick.feathers@ncemcs.com; charlie.bayless@ncemcs.com; diane.huis@ncemcs.com; sbeeney@mccarter.com; dqoulet@mccarter.com; erobertson@lrklaw.com; ryrobertson@lrklaw.com; snovosel@calpine.com; michelle.d.grant@dyneqy.com; abe.silverman@nrq.com; lbaker@uspowergen.com; bvayda@ppani.net; director@ppani.net; jmb@bettsandholt.com; cjohnson@ces-ltd.com; greg@opsi.us; jrohrbach@acespower.com; jwilson@wilsonenec.com; poulos@pjm-advocates.org; mark.macdougall@smeco.coop; eugene.bradford@smeco.coop; owen.kean@americanchemistry.com; emontero@chemistrycouncilnj.org; dhart@chemistrycouncilnj.org; jklein@ohiochemistry.org; bbennett@ohiochemistry.org; ssalmon@afsinc.org; murraykm@mwncmh.com

Subject: Comments of Murray Energy Corporation in Support of the Request of FirstEnergy Solutions Corporation for Emergency Order Pursuant to Federal Power Act Section 202(c) Submitted March 29, 2018

Date: Thursday, April 19, 2018 4:19:23 PM

Attachments: [118041916191301003.png](#)
[Comments of Murray Energy in Support of Request for Emergency Order FES w sig.pdf](#)
[PERRY FES Sec 202c LTR w sig.pdf](#)

Please find attached for filing the Comments of Murray Energy Corporation in Support of Request for Emergency Order and Motion to Intervene.

Thank you.

Vickie Warden

Legal Secretary

Litigation

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**BEFORE
THE UNITED STATES DEPARTMENT OF ENERGY**

REQUEST OF FIRSTENERGY SOLUTIONS)	
CORPORATION FOR EMERGENCY ORDER)	DOCKET NO. EO-18-
PURSUANT TO FEDERAL POWER ACT)	
SECTION 202(C) SUBMITTED MARCH 29,)	
2018)	

**COMMENTS OF MURRAY ENERGY CORPORATION IN
SUPPORT OF REQUEST FOR EMERGENCY ORDER AND MOTION TO
INTERVENE**

I. STATEMENT OF SUPPORT

On March 29, 2018, FirstEnergy Solutions Corporation (“FirstEnergy Solutions”), on behalf of its named subsidiaries, requested that the Secretary of Energy (“Secretary”) find that an emergency condition exists in the footprint of the PJM Interconnection L.L.C. (“PJM”) which requires immediate intervention by the Secretary in the form of a Section 202(c) emergency order. The request is made pursuant to Section 202(c) of the Federal Power Act (“FPA”), 16 U.S.C. §824a(c), Section 301(b) of the Department of Energy (“DOE”) Organization Act, 42 U.S.C. §7151(b), and certain of DOE’s Rules of Practice and Procedure, 10 CFR §§205.370-205.373. FirstEnergy Solutions requests a Section 202(c) emergency order directing: “(a) certain existing nuclear and coal-fired generators in PJM, as detailed herein, to enter into contracts and all necessary arrangements with PJM, on a plant-by-plant basis, to generate, deliver, interchange, and transmit electric energy, capacity, and ancillary services as needed to maintain the stability of the electric grid and (b) PJM to promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide to energy markets and the public at large, including fuel security and diversity, as detailed herein.”

Murray Energy Corporation (“Murray Energy”) is the largest underground coal mining company in the United States and the largest employer of coal workers in the United States in the underground mining industry, with over 5,600 employees. Murray Energy and its subsidiary companies currently operate fifteen (15) coal mines, consisting of eleven (11) underground longwall mining systems and forty-six (46) continuous mining units in Ohio, Illinois, Kentucky, Utah and West Virginia. Murray Energy produces approximately 75 million tons of bituminous coal each year. It supplies coal to many of the largest coal-fired utility generating facilities in the U.S., and specifically within the PJM footprint. Notably, Murray Energy supplies coal for use in electricity production at FirstEnergy Solutions’ W. H. Sammis and Bruce Mansfield plants.

Murray Energy strongly and enthusiastically supports FirstEnergy Solutions’ request for a Section 202(c) emergency order. FirstEnergy Solutions’ March 29, 2018 request makes a compelling and well-documented case for the emergency order. The relief requested is within the Secretary’s legal authority under Section 202(c) and is justified under the dire and extreme circumstances that threaten the continued viability of baseload, coal fired generation in the PJM footprint, the safety and reliability and economics of the PJM regional grid and the Nation’s vast coal resources in the Midwest.

To the extent appropriate, Murray Energy also moves to intervene in this matter.

II. MURRAY ENERGY’S VITAL INTEREST IN THIS ACTION

President Trump has vowed to preserve coal jobs and low-cost, reliable and fuel source electricity for all Americans, including retirees on fixed incomes, single mothers, and manufacturers who depend on low-cost electricity to produce their products. On March 28, 2017, President Trump issued his Energy Independence Executive Order 13783 which affirms the “national interest to provide clean and safe development of our Nation’s vast energy

resources, while at the same time avoiding regulatory burdens that unnecessarily encumber energy production, constrain economic growth, and prevent job creation.” Executive Order 13783, Section 1(a). Executive Order 13783 specifically directed the U.S. EPA to review and initiate reconsideration proceedings to “suspend, revise, or rescind” the Obama Clean Power Plan as appropriate and consistent with law.” *Id.*, Section 4(a) – (c). In response, the U.S. EPA has proposed the repeal of the Obama Clean Power Plan in Docket No. EPA-HQ-OAR-2017-0355. Murray Energy supports the U.S. EPA action as a necessary and well-deserved first step to protect and preserve coal-fired, baseload generation and to promote the national interest in the Nation’s vast coal resources.

However, the U.S. EPA’s first step in Docket No. EPA-HQ-OAR-2017-0355 to repeal the Obama Clean Power Plan will go for naught unless federal agencies take a concerted, coordinated and aggressive course of action to protect and preserve the Nation’s valuable coal-fired and nuclear generation capacity, including most notably that within the Midwest and the PJM grid, a regional grid that serves a significant proportion of the Nation’s industrial, commercial, residential and national defense electricity consumers that depend upon a safe, reliable, and economic source of electricity generation.

Murray Energy has a vital interest in FirstEnergy Solutions’ request for an emergency order under Section 202. Murray Energy was established in 1988 when Mr. Robert E. Murray mortgaged virtually everything he owned and purchased a single coal mine in Southern Ohio. Thirty years later, Murray Energy is the largest underground coal mining company in the U.S. As stated, Murray Energy is the largest employer of coal workers in the United States in the underground mining industry, with over 5,600 employees. Murray Energy and its subsidiary companies currently operate fifteen (15) coal mines, consisting of eleven (11) underground

longwall mining systems and forty-six (46) continuous mining units in Ohio, Illinois, Kentucky, Utah, and West Virginia. Murray Energy produces approximately 75 million tons of bituminous coal each year and supplies coal to many of the largest coal-fired electric utility generating facilities in the United States.

Murray Energy is also engaged in related business operations and activities, including owning and operating four (4) mining equipment manufacturing and rebuild facilities along with a number of river, truck and rail terminals, and twenty-five (25) river towboats and over 500 coal barges on the inland waterway system. Many of Murray Energy's mining complexes are strategically located near its customers' electric generating stations, and all have excellent, low cost transportation infrastructures to Murray Energy's markets. The vast majority of the coal produced from Murray Energy's mines in the U.S. is used for the generation of electricity. Murray Energy is dependent on the continuing viability and operation of coal-fired generation in the United States.

Murray Energy specifically supplies coal to FirstEnergy Solutions' W.H. Sammis and Bruce Mansfield plants and Allegheny Energy Supply Company's Pleasants Power Station. Murray Energy is under contract to provide 6,500,000 tons of coal per year to the W.H. Sammis and Bruce Mansfield plants through 2028¹. Murray Energy is also under contract to provide 250,000 tons of coal to the Pleasants Power Station in 2018.

Given the current threats to coal-fired generation, Murray Energy, along with other coal producers and related industries, and numerous generating companies and electric utilities, are threatened with bankruptcy and significant economic harm if coal-fired capacity is forced out of the market and prematurely closed. Under the Obama Administration, over 531 coal-fired

¹ Murray Energy received a Notice of Reduction in Generation Capacity from FirstEnergy Generation, LLC dated March 23, 2018 stating that the 2018 tonnage will be reduced from 6,500,000 to 2,200,000 tons.

generating plants, or 59,000 megawatts of generating capacity through 2016, were closed prematurely, many as a result of new and potential regulations that were put into place illegally, without proper cost analysis, and without proven environmental benefits. Further, an additional 12,700 megawatts of coal fired-generation will be closed by the end of 2020, bringing coal's share of electricity to as low as twenty-seven percent (27%). These closures are the functional equivalent of entirely eliminating the combined electricity supplies of Ohio, Pennsylvania, Indiana, and West Virginia. In the PJM footprint alone, which covers all or part of thirteen (13) states and sixty-five (65) million people, 11,000 megawatts of coal-fired electricity generation has been closed over the past four (4) years. In addition, 20,056 megawatts of this baseload capacity in PJM is contemplated for closure.

This devastation has had, and will continue to have, far-reaching consequences for the United States. As well documented by FirstEnergy Solutions, numerous coal-fired and nuclear plants in PJM have announced that they are financially challenged and are closing or contemplating closure. FirstEnergy Solutions itself has now filed for bankruptcy. By early 2016, the total value of the American coal industry had declined from \$68.8 billion five (5) years before to \$4.08 billion, a ninety-four percent (94%) reduction in value. A total of fifty-two (52) coal companies were in bankruptcy proceedings with only four (4) major companies remaining financially solvent. Local rural communities in coal producing regions, and in areas that depend on coal-fired power plants, are losing jobs and millions of dollars in local tax support due to the closure of coal-fired generation plants. This devastates the residents and the employees supporting local businesses, governments, and school districts.

Given the dire and extreme circumstances fully documented in FirstEnergy Solution's March 29, 2018 request for emergency order, it is absolutely imperative that the Secretary immediately issue the requested Section 202 emergency order.

III. THE SECRETARY HAS THE LEGAL AUTHORITY TO ISSUE THE REQUESTED SECTION 202 EMERGENCY ORDER

Pursuant to Section 202(c) of the Federal Power Act (16 U.S.C. §824a (c)), the Secretary of the U.S. Department of Energy has the authority, whenever the Department determines that an “emergency exists by reason of . . . a shortage of electric energy or of facilities for the generation . . . of electric energy . . . ,” to issue an emergency order to prevent an electric generation plant from shutting down:

(c) Temporary connection and exchange of facilities during emergency

1) During the continuance of any war in which the United States is engaged, or whenever the Commission determines that *an emergency exists by reason of* a sudden increase in demand for electric energy, or *a shortage* of electric energy or *of facilities for the generation* or transmission *of electric energy*, or of fuel or water for generating facilities, or other causes, *the Commission shall have authority*, either upon its own motion or upon complaint, with or without notice, hearing, or report, *to require by order such temporary* connections of facilities and such *generation*, delivery, interchange, or transmission *of electric energy* is in its judgment will best meet the emergency and serve the public interest. If the parties affected by such order fail to agree upon the terms of any arrangement between them in carrying out such order, the Commission, after hearing held either before or after such order takes effect, may prescribe by supplemental order such terms as it finds to be just and reasonable, including the compensation or reimbursement which should be paid to or by any such party. (emphasis added).

The Secretary's authority and discretion under Section 202(c) is very broad and the duration for action is not limited. Section 202(c) empowers the Secretary to act “whenever [he] determines that an emergency exists by reason of “certain specified market conditions or other

causes” to order actions “as in [his] judgment will best meet the emergency and serve the public interest.” 16 U.S.C. §824a (c)(1).

DOE’s regulations define emergency broadly, stating that an emergency “can result from a sudden increase in customer demand, an inability to obtain adequate amounts of the necessary fuels to generate electricity, or a regulatory order which prohibits the use of certain electric power supply facilities. 10 CFR §205.371, defines “emergency” and provides:

§ 205.371 Definition of emergency. (“Emergency,” as used herein, is defined as an unexpected inadequate supply of electric energy which may result from the unexpected outage or breakdown of facilities for the generation, transmission or distribution of electric power. Such events may be the result of weather conditions, acts of God, or unforeseen occurrences not reasonably within the power of the affected “entity” to prevent. An emergency also can result from a sudden increase in customer demand, an inability to obtain adequate amounts of the necessary fuels to generate electricity, or a regulatory action which prohibits the use of certain electric power supply facilities. Actions under this authority are envisioned as meeting a specific inadequate power supply situation. Extended periods of insufficient power supply as a result of inadequate planning or the failure to construct necessary facilities can result in an emergency as contemplated in these regulations. In such cases, the impacted “entity” will be expected to make firm arrangements to resolve the problem until new facilities become available, so that a continuing emergency order is not needed. Situations where a shortage of electric energy is projected due solely to the failure of parties to agree to terms, conditions or other economic factors relating to service, generally will not be considered as emergencies unless the inability to supply electric service is imminent. Where an electricity outage or service inadequacy qualifies for a section 202(c) order, contractual difficulties alone will not be sufficient to preclude the issuance of an emergency order.)

Section 205.373 specifies the information required to be submitted. FirstEnergy Solutions has more than adequately addressed these requirements at pages 27-31 of the March 29, 2018 request.

IV. FIRSTENERGY SOLUTIONS HAS FIRMLY ESTABLISHED THAT AN EMERGENCY EXISTS UNDER SECTION 202 DUE TO THE RECENT AND IMMINENT CRITICAL REDUCTION IN NUCLEAR AND COAL-FIRED GENERATION CAPACITY

It is imperative that the Secretary act expeditiously to grant the relief requested by FirstEnergy Solutions to ensure continued operation of a secure and diverse electric generation fleet to secure reliable, efficient and cost-effective supplies of electricity in the PJM footprint.

This action is one of the most important actions presented to the Secretary for his consideration. During the past six years, close to 58,000 MW of highly dependable baseload generating capacity with stable cost structures and on-site fuel supply have been retired. Most of these generating units burned coal, but almost 5,000 MW of nuclear capacity also have been shut down. Prior to retirement, these generating units accounted for eighteen percent (18%) of total baseload generating capacity in the United States, routinely generating 2,555,000 GWh of electricity per year. The replacement cost for this generation is more than \$100 billion. Approximately another 30,000 MW are currently scheduled to be retired. Despite this fact, neither FERC nor PJM have ever systematically examined in depth the impact of these retirements on grid resilience, the vulnerability to severe price spikes, or the ability to keep electricity costs at reasonable levels on a long-term basis.

A. Continued Operation of American's Coal-Fired Electricity Generation Fleet in the PJM Grid is Absolutely Vital to Ensuring Reliable, Efficient and Cost-Effective Supplies of Electricity to the Region

America enjoys an abundant resource of proven coal reserves. Coal is a critical component of America's energy resources and continued operation of America's coal-fired

electricity generation fleet in the PJM grid is absolutely vital to ensuring reliable, efficient and cost-effective supplies of electricity to the region.

For over a century, coal-fired generation has been the safe, reliable, low-cost, and fuel-secure source of electricity in America, providing the baseload generation, as well as the capacity, reserve, and ancillary services that are absolutely necessary to maintain the integrity and reliability of our Nation's power grids. The historical fleet of coal-fired generating units, particularly in the Midwest, has served the economy well, providing as much as eighty to ninety percent (80 - 90%) of in-state generation in many states over the years. Coal-fired generation has also served the commercial, manufacturing and industrial sectors of this Country, providing low-cost, reliable, high capacity and peak demand services that are absolutely necessary for American manufacturers to operate and to compete in the global marketplace.

Over the years, coal-fired generation has been less susceptible than other sources to both short-term and long-term fuel price variation and supply. Coal-fired generation has been the constant through the years of the Arab oil embargo, the natural gas shortages of the 1970's and 1980's, the ensuing volatility in natural gas prices thereafter, nuclear power regulatory challenges, and extreme weather conditions, most recently the 2014 Polar Vortex and 2018 Bomb Cyclones.

There is no better illustration of the need to protect baseload generation than the so-called "Bomb Cyclone," which immersed the eastern United States in extremely cold, windy conditions from December 27, 2017 through January 8, 2018. Notwithstanding that this cold snap occurred primarily over the holidays, at least two (2) million Americans lost their power, and, tragically, twenty-two (22) people lost their lives. Without the electricity provided by our coal-fired and

nuclear power plants, the devastation of this very short twelve (12) day Bomb Cyclone would have been far worse.

The United States Department of Energy's National Energy Technology Laboratory recently issued a report ("Government Study") analyzing the reliability and resiliency of different sources of electricity generation during the Bomb Cyclone. The Government Study confirmed what many of us have already known, that coal was the single most reliable and resilient form of electricity production during that critical time. Coal and nuclear power provided eighty-nine percent (89%) of the electricity during this Bomb Cyclone. During this time coal-fired generation averaged an output level of 46,038 megawatts, over fifty percent (50%) greater than the average of 29,849 megawatts. Indeed, if it were not for the electricity generated by our Nation's coal-fired power plants, with ample capacity and on-site fuel availability, the grids would have experienced a massive nine (9) to eighteen (18) gigawatts of shortfall, leading to system collapse.

During this cold snap, coal far outperformed all other fuel sources, particularly natural gas and renewables. At least 37,000 megawatts of supposedly available natural gas-powered electricity was entirely unavailable due to the priority for home heating use and frozen natural gas pipelines. Where natural gas was available, prices peaked at over \$95 per million BTU in the PJM, and over \$175 per million BTU in New York City, which is sixty (60) times the normal cost. Also, during this time, the cost of electric power from natural gas-fired plants peaked at over \$500 per megawatt hour, compared to a predominant rate of about \$28 per megawatt hour. The ISO New England regional transmission organization has confirmed that their region is at major risk of fuel insecurity and it currently has no defined solution, due to New England's

dependence on natural gas relying on ‘just in time’ delivery and the retirement of coal and nuclear generating capacity with 70-80 day supply of coal stored in stockpiles on site.

Similarly, wind turbines and solar panels contributed virtually nothing to our Country’s electricity needs at that dire time, as cloud cover and wind speeds caused these resources to be unable to dispatch. The Government Study concluded that wind energy was down twelve-percent (12%) across the eastern United States. When considered together, wind and solar electricity generation declined nineteen percent (19%) in Midcontinent Independent System Operator (“MISO”), twenty-nine percent (29%) in Southwest Power Pool (“SPP”) and thirty-two percent (32%) in Electric Reliability Council of Texas (“ERCOT”). Fortunately, coal-fired electricity was able to step up and to fill the void for seventy-four percent (74%) of this incremental lost generation.

The Government Study valued the resilience provided by coal at \$3.5 billion in the PJM market alone, which equates to \$288 million per day. PJM’s President and CEO, Mr. Andrew Ott, recently stated that 1,410 megawatts of nuclear capacity and 3,688 megawatts of coal-fired capacity that operated during the recent cold snap in the eastern United States are scheduled to be deactivated within the next five (5) years.

These problems from the recent cold snap were not an isolated incident. During the so-called “Polar Vortex” of early 2014, PJM came within 500 megawatts of a major system disruption on a demand of 140,000 megawatts. A total of 9,300 megawatts of supposedly available natural gas-fired generation was not available due to gas supply disruptions to the generators. Further, the cost of producing electricity in the Midwest and Mid-Atlantic area rose above \$1,000 per megawatt-hour for the first time in American history.

During this time, an Ohio-based electric power company was ordered by the State's Public Utility Commission to be connected to 3,800 megawatts of wind and solar power. Only fifteen (15) megawatts of the 3,800 megawatts were available during the crisis. What the utility relied on during the cold snap was 8,170 megawatts of coal-fired generation. As all 8,170 megawatts have been closed, what will happen next time?

The recent Bomb Cyclone and 2014 Polar Vortex demonstrate that our electric power grids are not as resilient and reliable as the independent power grid operators, some electric utilities, and the Federal Energy Regulatory Commission ("FERC") claim. Indeed, we have a power grid reliability and resiliency crisis in much of America. But, will a system collapse occur before they recognize and do something about it?

During the 2018 Bomb Cyclone, the consequence of lack of fuel diversity was seen in New England ISO ("NE ISO") pricing. Comparing the first half of January 2018 to the first half of January 2017, natural gas prices (Algonquin hub) were up from an average of \$5.60 per MMBtu in 2017 to \$22.78 per MMBtu in 2018, a 307 percent increase. Power prices (Mass Hub) were up from an average of \$41.80 per megawatt-hour to \$147.74 per megawatt-hour, a 253 percent increase. Also relevant was the over 7000 percent increase in use of oil for power generation as a result of supply constraints on natural gas due to the lack of storage and pipeline capacity. Dual fuel gas and oil plants had to switch to oil to meet load. Pricing was also up in PJM West, which had an average energy price of \$119.53 per megawatt-hour in the first half of January 2018. The average energy price and price increases were higher in NE ISO than PJM West because the coal generation in PJM increased by about 10 percent in the first half of January 2018 which significantly reduced the increased generation required from oil. There is

no question that had it not been for the coal capacity in PJM, MISO and elsewhere the power prices would have been significantly higher.

As addressed by FirstEnergy Solutions, numerous baseload plants in PJM have announced that they are financially challenged and are closing or contemplating closure. If action is not immediately taken, thousands of additional megawatts of reliable baseload capacity will retire leaving PJM without fuel-secure baseload resources. These closures include:

- FirstEnergy Solutions, which through Applicants indirectly owns 12,300 MW of generation, has now filed for bankruptcy. Multiple plants are at risk for permanent closure as a result of this expected action.
- FirstEnergy Solutions submitted notices to PJM on March 28, 2018, that it would deactivate its three nuclear plants, Davis-Besse (908MW), Perry (1,268 MW), and Beaver Valley (1,872 MW), by 2021.
- FirstEnergy Corp. announced that Units 5-7 at the W.H. Sammis coal-fired plant (1,490 MW) are in danger of being closed. The company previously announced that Units 1-4 (720 MW) will close by May 2020.
- FirstEnergy Corp. has announced that the 2,510 MW Bruce Mansfield coal-fired plant is at risk of closure due to the exposure to changing market conditions.
- Allegheny Energy Supply Company, LLC, a FirstEnergy Corp. subsidiary, recently submitted a deactivation notice for Pleasants Power Station, a 1,300 MW coal-fired plant in West Virginia.
- Dayton Power & Light has announced the closure by June 2018 of the J.M. Stuart coal-fired plant (2,318 MW) and the Killen Station Unit 2 coal-fired plant (600 MW), citing market conditions making the plants not economically viable. Stuart Unit 1 was closed even earlier, on September 30, 2017.
- Owners of the 1,884 MW Homer City coal-fired power plant attempted to sell the plant in 2016, but were unable to find a buyer; Standard & Poor's analysts cite lower power prices and increasing expenses as driving forces behind the facility's ills.
- Westmoreland Partners recently announced the sale or closure of the 209 MW Roanoke Valley coal-fired power plant. As anticipated, on March 1, 2017, these units retired.

- Exelon has announced that it will close the Oyster Creek nuclear plant (608 MW) in October 2018 – a decade before the end of its operating license – citing negative economic factors.
- Exelon has announced the premature closure of the 837 MW Three Mile Island nuclear power plant in September 2018, citing deteriorating economic value.

(March 29, 2018 Request, pp. 20-22)

Renewable energy sources are not a viable or credible alternative to baseload coal-fired generation. Wind and solar generation sources are intermittent and unreliable and therefore cannot be relied upon to meet peak or base load demand. Without the price support provided by the Wind Production Tax Credit, wind generation will be a high cost resource. Natural gas-fired generation is not the answer either, as gas pricing is volatile and gas supply is unreliable given limited gas storage capacity, pipeline limitations and a requirement to meet residential and commercial customer requirements ahead of power generation.

As asserted by FirstEnergy Solutions, PJM itself has recognized the need for resiliency.

Fuel diversity and resiliency are key components of a resilient grid.

PJM itself has recognized the need for resiliency, finding that, “[i]n addition to delivering energy services reliably during strained system conditions, to which probabilities can be attached, e.g., plant outages, weather variability), a resilient energy system also must be resistant to larger scale shocks to which it is difficult to attach probabilities . . .” PJM recently concluded that “reliability attributes supplied through generation and other resources . . . support reliability” and “the maintenance or assurance of these attributes into the future are important to resilience mitigation.” Fuel diversity and security are key components of a resilient grid. PJM acknowledged the connection between diversity and resiliency when it committed to “analyz[ing] future trends in resource mix and their impacts on both reliability and resilience.” As PJM’s market monitor stated, “[s]ignificant reliance on specific fuels, including nuclear, coal and gas means that markets are at risk from a significant disruption in any one fuel.” (March 29, 2018 Request p, 23).

NERC also recognizes the critical contributions of nuclear and coal-fired generation to the electric grid. As FirstEnergy Solutions states:

NERC goes further, recognizing not only the importance of fuel diversity in maintaining a resilient energy system, but also the critical contributions of nuclear and coal-fired resources to mitigating risks to the electric grid. Overreliance on natural gas, by contrast, *increases* risk to the electric grid because, as NERC states, “within a relatively short time, a major failure” in the natural gas transmission system “could result in loss of electric generating capacity that could exceed the electric reserves available to compensate for these losses.” As explained by Dr. Henry Chao, Executive Advisor and Vice President at Quanta Technology and former Vice President at New York Independent System Operator (“NYISO”): “Abundant supplies of natural gas provide many advantages to electric consumers, but . . . natural gas delivery systems lack the reliability and redundancy of the bulk electric system. Specifically, there are no systematic reliability criteria for natural gas delivery system planning and operations; whereas the electric power industry has mandatory reliability standards that are developed and enforced by NERC.” (March 29, 2018 Request, p. 23)

Murray Energy fully endorses FirstEnergy Solutions’ conclusion that unless immediate action is taken, the continued retirement of nuclear and coal-fired generating units will invariably lead to increased electric price volatility, lessened grid resiliency and dependability, uncertain electric security, economic instability and job losses. FirstEnergy Solutions states it best:

Unless immediate action is taken, the continued retirement of nuclear and coal-fired generating units – by breeding greater dependence on generation fueled by natural gas, which is subject to supply disruptions, constrained pipeline capacity, a general inability to store fuel on-site, and competing demand for consumer heating in winter months – will increasingly result in significant, negative outcomes for the approximately 65 million people living and working within the PJM footprint. These harmful consequences include increased electric price volatility, lessened grid resilience and dependability, uncertain electric security in the future, decreased economic stability, and severe job losses – especially in the coal sector – as both power plants and fuel suppliers declare bankruptcy and cease operations. Combined, these conditions are potentially disastrous for the electric grid and the economy. PJM itself recently found that as the “resource mix moves in the direction of less coal and nuclear generation, generator reliability attributes of frequency response, reactive capability and fuel assurance decrease . . .” (March 29, 2018 Request, p. 24).

B. At-Risk Merchant Nuclear and Coal-Fired Plans Must Be Compensated For the Benefits of Resiliency and Diversity Provided to the Grid.

FirstEnergy Solutions is absolutely correct in asserting that at-risk merchant nuclear and coal-fired plants must be compensated for the benefits of resiliency and diversity provided to the grid. Neither FERC nor PJM have addressed these important issues. Further delay will continue to devastate the reliability of the grid and cannot be tolerated.

A recent study performed by the leading global economic consulting firm, IHS-Markit concludes that, on a going forward basis (excluding sunk costs), the costs of continuing to operate many recently-retired coal-fired plants is significantly lower than the long-term marginal cost of building new generation.² In some instances, on a properly-calculated apples-to-apples basis, the cost of electricity generated by a newly-constructed power plant may be approximately twice that of a baseload coal or nuclear plant that has recently retired.³

Furthermore, baseload coal and nuclear plants typically operate at high capacity factors and have stable operating costs because fuel can be purchased under long-term contracts with fixed pricing. As such, coal plants are valuable assets which limit exposure to price spikes, keep electricity costs at reasonable levels and historically have been the backbone of the operation of the grid. From an economic standpoint, it seldom should make sense to shut down these generating units, especially since, once shut down, these generating units are permanently lost. Yet that is precisely what is occurring today.⁴

A related problem that will worsen with further retirements of baseload coal and nuclear plants will be the increased frequency, severity, and duration of price spikes that will arise with

² IHS Markit, *Ensuring Resilient and Efficient Electricity Generation: The Value of the current diverse US power supply portfolio*, at p. 8 (Sept. 2017) (hereinafter, "IHS Study").

³ IHS Study at 36.

⁴ Many of the companies that historically have been leaders in electric generation, such as AEP, Duke, NRG and Calpine, have announced that, except for generating units supported by long-term Purchase Power Agreements, they will no longer build new merchant generation and, in several instances, are liquidating their entire merchant generation portfolio. This is reducing the number of experienced players interested in continuing to own and operate generation. In addition, negative energy prices primarily as a result of wind production tax credits are becoming increasingly prevalent, with crushing impacts on every type of base load.

increased dependence upon natural gas. In particular, during the past several years the ability of grid operators to shift back and forth between natural gas-fired generation and coal-fired generation has played an increasingly critical role in managing price volatility. When gas prices rise, coal generation increases; when gas prices fall, coal generation declines. With additional coal plant retirements, however, the ability to reduce gas use by increasing use of coal-fired capacity declines, reducing the amount of available fuel switching by a startling 11 BCF/day in the past six years.⁵ As a result, natural gas price increases are expected as coal generation is not available to cap gas demand and price.

Further, the reduced potential for fuel switching is not the only change that is occurring that could cause adverse volatility and price spikes. LNG exports from the U.S. began in earnest in 2016 with the completion of the Sabine Pass facility which reached 2 billion cubic feet per day (“BCFD”) by year end. Another six plus BCFD of LNG capacity is under construction and 13.5 BCFD of LNG capacity is in advanced development.⁶ As exports of LNG grow, natural gas pricing is expected to increasingly be affected by the global price, thereby increasing volatility and making it even more important to keep existing coal-fired units online in order to maximize the availability of fuel switching.

IHS calculates that retirement to the existing coal and nuclear generation capacity would result in an increase of retail power prices by about 25 percent and net consumer costs by about \$98 billion per year.⁷ Therefore, failure to maintain the resource diversity by prematurely retiring nuclear and coal baseload units could, extrapolating over the next 20 years, increase electricity costs by as much as \$2 trillion. These effects are magnified further as soaring

⁵ ABB, Actual and Projected Coal Capacity Retirements in the United States, 2011-2020, Ventyx Database, October 18, 2017.

⁶ EVA, Quarterly LNG Outlook, December 2017.

⁷ IHS Study at 5, 37-38.

electricity costs ripple through the broad economy, with large adverse impacts over the three year period on U.S. GDP (a loss of 0.8%), on real disposable income (a drop of about \$845 per household in 2016 dollars), and jobs (a loss of 1 million).⁸

Every time additional coal-fired generation is retired, the vulnerability to frequent and severe natural gas and electricity price spikes rises, since the natural gas price increase required to induce sufficient fuel shifting to balance the market continues to increase. As a result, in any winter as cold or colder as the winter of 2013-14, the potential natural gas price increase required to balance the market could be as much as two to three times as great as in the Polar Vortex winter.

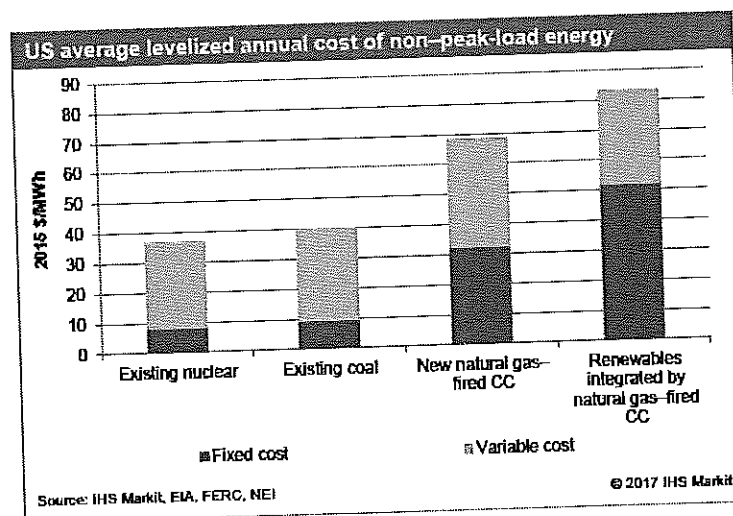
It is a bedrock principle of power supply planning and cost-effective risk management that maintaining resource diversity (creating optionality) has significant, tangible economic value. Putting “all of one’s eggs in one basket” seldom makes sense. FERC openly acknowledges, however, that its current rules fail to take this principle into account, turning a blind eye towards this issue. Instead, its rules focus strictly on short-term marginal costs – i.e., day-ahead or same-day energy pricing and capacity payments based upon expected needs three years out.

This rigid focus on short-term marginal costs gives generation owners an incentive to focus only on maximizing short-term operating margins, *not* on maximizing operating efficiency over the seven to twelve year planning horizon required for investments in new baseload generation. The IHS Study highlights the critical importance of this issue. IHS estimates that over the past three years, maintaining a diverse generating mix has saved electricity users an average of \$98 billion/year – i.e., extrapolated out over a twenty (20) year period, potentially as much as \$2 trillion.

⁸ HIS Study at 5, 39.

The recent September 2017 IHS Study shows that a diverse portfolio of generation resources that include baseload coal and nuclear units is necessary to ensure that electricity prices remain at reasonable levels on a long term basis. As articulated in the IHS Study, a cost effective electrical power supply portfolio integrates available generation technologies – intermittent renewables, gas turbine, gas combined cycle, and baseload nuclear and coal – to meet consumer demand at the lowest overall cost. Because fifty percent (50%) of consumer demand is constant, day or night, winter or summer, baseload nuclear and coal plants are the most cost-effective resources to serve this portion of the electrical load.

The figure below from the IHS Study compares the going forward costs for existing coal and nuclear power baseload generation to the cost of replacement of this generation with (1) natural gas-fired combined cycle generation and (2) a mix of intermittent wind and solar resources integrated with natural gas-fired combined cycle generation.⁹



This comparison shows that replacing existing coal and nuclear generation with natural gas and intermittent renewable generation would cost approximately double the cost of the existing coal and nuclear generation. The IHS Study notes that, as a result, the continued

⁹ IHS Study at 36.

retirement of baseload coal and nuclear units could result in significantly eroding consumer net benefits, stating as follows:

The current accelerated turnover of generating resources in the US power supply portfolio is eroding the net benefit to US consumers from electricity consumption. The potential exists for current trends to lead to a less diverse supply portfolio made up of no nuclear, coal, or oil generating resources and 20% less hydro capacity, with the rest of generation made up of wind and solar resources integrated with natural gas-fired generating technologies in proportions reflecting the current mix of these technologies and fuel sources in the new power supply pipeline.¹⁰

IHS calculates that this would result in an increase of retail power prices by about 25 percent and net consumer costs by about \$98 billion per year.¹¹ Therefore, failure to maintain the resource diversity by prematurely retiring nuclear (and coal) baseload units could, extrapolating over the next 20 years, increase electricity costs by as much as \$2 trillion. These effects are magnified further as soaring electricity costs ripple through the broader economy, with large adverse impacts over the three (3) year period on U.S. GDP (a loss of 0.8%), on real disposable income (a drop of about \$845 per household in 2016 dollars), and jobs (a loss of 1 million).¹²

As coal capacity is retired at alarming rates, however, the crucial market balancing will cease to be effective. Many coal units scheduled for closure were called upon to meet the exigent circumstances created by the Polar Vortex. If gas-to-coal switching can no longer moderate demand effectively, prices will have to go high enough to shut-in LNG exports – putting U.S. residential, commercial, and industrial end users at the whim of international markets. End users may be subjected to prices of \$10.00/MMBtu or higher for an extended period of time – more than 3-4 times recent levels. With falling diversification in the electricity

¹⁰ IHS Study at 36.

¹¹ IHS Study at 5, 37-38.

¹² IHS Study at 5, 39.

sector and increasing reliance on natural gas, these increased natural gas costs will flow directly into electricity markets, increasing costs sharply.

Future retirements of coal and nuclear generation will only continue to increase demand for natural gas generation and reduce the ability to switch from gas-to-coal in periods of system stress. Absent immediate action, it is entirely plausible that within the next decade an additional 20-25% of coal and nuclear capacity may be retired. This will lead to additional employment loss and will further increase vulnerability of the grid to natural gas price shocks, while at the same time making these shocks significantly more likely by reducing the ability to switch from gas-to-coal during periods of high system stress. Even if these obstacles could be overcome, there will likely be a significantly increased fuel cost for natural gas generators and, by extension, higher prices for electricity.

FirstEnergy Solutions is entirely correct in contending that neither FERC nor PJM have addressed distorted market pricing conditions. Market rates not recognizing the benefit of resiliency and diversity are putting the Nation at risk for astronomical cost increases in the future. Neither FERC nor PJM have addressed the wave of recent and contemplated plant retirements. There has been no effort to address:

- The impact of continued retirement of baseload units on the ability of grid operators to meet voltage support and frequency control requirements or to provide reactive power;
- As detailed above, the potential cost-effectiveness of continuing to operate these plants, compared to the expected cost of new generation that might soon be needed in the regions in which retirements have been occurring;
- The potential long-term costs and price risks for electricity customers of failing to maintain resource diversity; and
- The ability to cost-effectively meet future state or federal environmental requirements that have a significant possibility of occurring within the next 5 to 10 years, if not sooner.

In sum, neither FERC nor PJM have acted to ensure adequacy of service and protect electricity users against long-term wholesale electricity prices that are higher than necessary in a number of specific respects. By failing to properly account for the value of baseload coal and nuclear generation, FERC and PJM have virtually ignored the role of resource diversity as it relates to potential outages, as well as the agencies' key role in maintaining wholesale power rates at just and reasonable levels and ensuring the safety, reliability and dependability of the Nation's electric supply system.

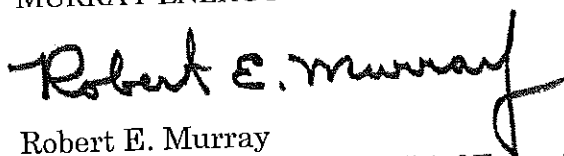
V. CONCLUSION

FirstEnergy Solutions' March 29, 2018 Request For Emergency Relief Under Section 202 is well-supported, justified and should be immediately granted.

On behalf of Murray Energy, and its ownership, management, and employees, we respectfully submit these comments.

Sincerely,

MURRAY ENERGY CORPORATION

A handwritten signature in black ink that reads "Robert E. Murray". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Robert E. Murray
Chairman, President and Chief Executive Officer
46226 National Road
St. Clairsville, Ohio 43950



ROBERT E. MURRAY
Chairman, President, &
Chief Executive Officer

PHONE: (740) 338-3100
FAX: (740) 338-3405
bobmurray@coalsource.com
www.murrayenergycorp.com

April 18, 2018

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: Request of FirstEnergy Solutions Corporation For Emergency Order Pursuant to
Federal Power Act Section 202(c) Submitted March 29, 2018

Dear Secretary Perry:

Please find enclosed the Comments of Murray Energy Corporation in support of the
above Request For Emergency Order, as well as a Motion to Intervene.

These Comments are filed in support of FirstEnergy Solutions' March 29, 2018 Request
For Emergency Order pursuant to Section 202(c) of the Federal Power Act.

Thank you for addressing this matter.

Sincerely,

MURRAY ENERGY CORPORATION

Robert E. Murray
Chairman, President & Chief Executive Officer

REM:jas
Enclosure

cc: Rick C. Giannantonio
General Counsel
FirstEnergy Solutions

Kelley E. Mendenhall
Vice President of Strategy and Planning
FirstEnergy Solutions

All Designated Parties of Record

From: Joseph Talnagi
To: [AskOE](#)
Subject: Assistance for FirstEnergy
Date: Thursday, April 19, 2018 3:47:19 PM

Assistance should be provided to FirstEnergy Corporation to support continued operation of their base load supply capacity, especially for the Davis-Besse, Perry, and Beaver Valley facilities. Nuclear energy generation is the most economical and expeditious approach to providing reliable base load supply while reducing carbon emissions, which surely would increase if the zero-emission nuclear facilities were to be replaced with natural gas-fired capacity. These facilities represent valuable national infrastructure which must be preserved if our nation is to retain the security of a reliable electricity supply. Power grid instability will result if reliable, high capacity-factor facilities such as these were lost.

I must emphasize that any such assistance should not be labeled as a "bail-out". Rather, it is more correctly viewed as a reasonable valuation of the zero-emissions, high reliability electricity supply. The current market structure does not place a reasonable value on these aspects of nuclear generation, which is grossly unfair since other zero-emissions generators of much lower reliability (e.g., wind turbines and PV solar) receive extremely generous subsidies and preferential treatment in the form of tax breaks and mandated capacity percentages (such as from Renewable Energy Portfolio provisions). Likewise, natural gas facilities are not penalized for their carbon emissions, which are significant, nor are they bearing the full costs of environmental damage caused in the extraction step by the near-universal use of fracking gas wells for enhanced production.

While some argue that these DOE provisions should be reserved for use in "true disasters", it is my opinion that preventing "true disasters" is an equally valid argument for invoking the emergency provisions. Surely loss of a reliable and stable electrical grid would be a disaster of monumental proportions if we throw away valuable generating infrastructure for no valid reason.

Thank you for the opportunity to submit my comments.

Joseph Talnagi
Dublin, OH

From: UJEP Union
To: AskOE
Cc: UJEP Union
Subject: UJEP Comments on Baseload Power
Date: Thursday, April 19, 2018 12:45:51 PM
Attachments: UJEP FERC NOPR Comment 101317.pdf

Attached please find comments submitted to the FERC NOPR proceeding by Unions for Jobs & Environmental Progress, an ad hoc association of national labor unions concerned about maintaining fuel diversity and the reliability and resilience of the electric grid.

Eugene M. Trisko
Treasurer, UJEP
(b) (6) cell

This message is confidential and is intended only for the use of the recipients identified above. If you receive this message by mistake, please delete it.

Unions for Jobs & Environmental Progress

P.O. Box 1446 Olney, MD 20830

ujep4jobs@gmail.com

www.ujep4jobs.org

Jim Hunter, IBEW (Ret.)
President, UJEP
jim@jimhunterllc.com

John Risch, SMART-TD
Vice President, UJEP
jrisch@smart-union.org

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

October 13, 2017

Attn: Docket No. RM17-3-000

Via E-Mail to <http://www.ferc.gov>

Re: Proposed Grid Resiliency Pricing Rule

Ladies & gentlemen:

I am writing on behalf of the labor organizations affiliated with Unions for Jobs & Environmental Progress (UJEP). UJEP affiliates represent some 3.2 million workers from the electric utility, mining, rail, transportation, and construction sectors.

Our affiliates' members have been adversely affected by the ongoing transformation of the electric power sector, and the increasing dependence on renewables and natural gas generation. These workers have lost tens of thousands of jobs as a consequence of the recent closures of mines and electric generating plants due to a number of factors, most importantly lower natural gas prices, compounded by the high compliance costs of recent U.S. EPA emissions regulations.

UJEP is an ad hoc association of labor unions involved in energy production and use, transportation, engineering, and construction. Our members are: International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers Union; International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers; International Brotherhood of Electrical Workers; International Brotherhood of Teamsters; SMART Transportation Division; Transportation • Communications International Union, IAM; United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada; United Mine Workers of America, and Utility Workers Union of America. For more information about us, visit www.ujep4jobs.org.

We strongly support the proposed Grid Resilience Pricing Rule as an appropriate and well-supported remedy to correct the failure of current market mechanisms to compensate the resiliency and related benefits provided by fuel-secure baseload power generation. We view the proposed rule as an important first step toward stabilizing the diversity and resilience of the generation fleet in competitive markets, and avoiding further job losses due to the premature closures of large coal and nuclear generating plants.

Preliminary analyses by ICF, Inc., indicate that the rule may cost some \$1 to \$4 billion annually, depending on natural gas prices.¹ This is prudent insurance for the critical national security and natural disaster recovery benefits of a stable and resilient electric supply system. The relatively rapid recovery of electric service in many parts of Texas following Harvey was facilitated by the ongoing operation of large baseload nuclear capacity during and after that extreme weather event, despite the loss of more than 7,000 MW of conventional generation capacity. The availability of fuel-secure baseload coal and nuclear capacity was likewise critical to the ability of the eastern interconnect to withstand the extreme load demands of the Polar Vortex.

Our concerns about the steady erosion of the large coal and nuclear baseload power fleet, and its adverse impacts on resiliency and our members' jobs, were expressed in our May 25th letter to Secretary Perry (see attached copy.) We note in summary here key findings of the May 2017 NERC reliability study cited in our letter:

- Conventional units, such as coal plants, provide frequency support services as a function of their large spinning generators and governor-control settings along with reactive support for voltage control. ... Coal-fired and nuclear generation have the added benefits of high availability rates, low forced outages, and secured on-site fuel. Many months of on-site fuel allow these units to operate in a manner independent of supply chain disruptions. ...
- Fuel diversity provides a fundamental benefit of increased resilience. Without this diversity, the impact of rare events impacting availability of resources on the power system increases, and are more likely the result of a common mode failure impacting multiple generation or transmission facilities (e.g., extreme and prolonged cold weather event lead to freezing generator components, transmission line icing, fuel delivery disruption, etc.) ...
- (N)atural gas generation is fueled using just-in-time transportation and delivery, and therefore, is subject to interruption. Roughly 50 percent of natural gas generation resources are considered interruptible, and in constrained natural gas markets these units are not expected to be served during peak pipeline conditions.²

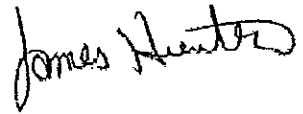
¹ ICF, Inc., Webinar on Proposed FERC NOPR, October 4, 2017, slide 27.

² National Electric Reliability Council, Synopsis of NERC Reliability Assessments - The Changing Resource Mix and the Impacts of Conventional Generation Retirements (May 2017).

We recognize that the proposed rule is on an aggressive timeline, and that many complex design and implementation issues must be resolved during the Commission's deliberations. We encourage the Commission to exercise all due diligence in completing its review and issuance of a final rule in a timely manner.

Thank you for your consideration of our views.

Sincerely,

A handwritten signature in black ink that reads "James Hunter". The signature is written in a cursive, slightly stylized font.

James Hunter
President, UJEP

Attachment

cc: Honorable Rick Perry
Honorable Neil Chatterjee
Honorable Cheryl A. LaFleur
Honorable Robert F. Powelson

Unions for Jobs & Environmental Progress

P.O. Box 1446 Olney, MD 20830

ujep4jobs@gmail.com

www.ujep4jobs.org

Jim Hunter, IBEW (Ret.)
President, UJEP
jim@jimhunterllc.com

John Risch, SMART-TD
Vice President, UJEP
jrisch@smart-union.org

The Honorable Rick Perry
Secretary
U.S. Department of Energy
1000 Independence Avenue
Washington, DC 20585-1000

May 25, 2017

Via E-Mail Transmission

Re: Baseload Reliability Study

Dear Secretary Perry:

I am writing on behalf of the organizations affiliated with Unions for Jobs & Environmental Progress (UJEP). UJEP affiliates represent some 3.2 million workers from the electric utility, mining, rail, and construction sectors. Our affiliates' members are significantly affected by the ongoing transformation of the electric power sector, and the increasing dependence on renewables and natural gas generation. These workers have lost tens of thousands of jobs as a consequence of the recent closures of mines and coal generating plants due to a number of variables, most importantly a glut of natural gas and lower natural gas prices, compounded by the high compliance costs of U.S. EPA regulations on mercury emissions.

UJEP is an ad hoc association of labor unions involved in energy production and use, transportation, engineering, and construction. Our members are: International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers Union; International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers; International Brotherhood of Electrical Workers; International Brotherhood of Teamsters; SMART Transportation Division; Transportation • Communications International Union, IAM; United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada; United Mine Workers of America, and Utility Workers Union of America. For more information about us, visit www.ujep4jobs.org.

We strongly support DOE's plan for a critical examination of electricity markets, which includes reviewing the value of baseload power, and the long-term security and resiliency of the electric grid. Baseload coal and nuclear power plants directly employ more than 154,000 workers, produce major infrastructure projects that put Americans to work, and support a resilient and dependable electric grid.

Baseload power plants have long been the dependable work horses of the electric system, providing energy and ancillary services to customers 24 hours a day, 365 days a year. With significant on-site fuel reserves, they provide the resiliency required to keep electricity flowing under all adverse circumstances. Unlike other energy resources, their operation is not subject to interruption by factors such as extreme weather events or attacks on infrastructure. Our national security, and the economic base of communities across the nation, is dependent on maintaining these plants to support a resilient supply of affordable electricity.

Extreme weather events such as the 2014 polar vortex resulted in a significant amount of gas-fired generation being unavailable due to curtailments of gas supplies and gas infrastructure challenges, threatening the reliability of the grid.¹ Many studies point to increasing frequency of extreme weather events for decades to come that could pose significant risks to the grid.

Numerous baseload power plants have shut down in recent years, and more are expected to close prematurely in the near future. According to EIA, some 40,000 megawatts of coal generation capacity has been shuttered due to the high cost of compliance with EPA's 2012 mercury rule alone.² Once these plants are retired, they are gone for good. Baseload generation is under serious threat from market-distorting subsidies and mandates for non-baseload renewable generation, regulations that target these resources, low natural gas prices, and markets that do not value resiliency and dependability. Further plant closures would contribute to market volatility, result in significant job loss, and discourage industrial development opportunities nationwide. A manufacturing base, and the jobs that go with it, cannot be attracted to return to areas lacking affordable, reliable sources of baseload power.

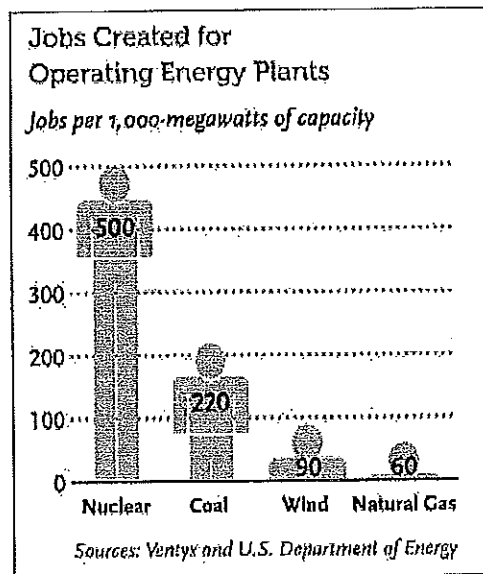
Jobs by Energy Source

Our coal and nuclear baseload power plants – and the dedicated, skilled workers who operate, maintain, and supply them – are the lifeblood of their communities. They

¹ NERC Polar Vortex Review, (September 2014)
http://www.nerc.com/pa/rrm/January%202014%20Polar%20Vortex%20Review/Polar_Vortex_Review_29_Sept_2014_Final.pdf

² DOE/EIA, Annual Energy Outlook Early Release: Analysis of Two Cases (May 2016) at 27.

provide a strong tax base for essential public services and support more high-paying jobs than other forms of electricity generation (see chart below.) Workers depend on these plants as a basic source of their livelihoods, and their communities, and the country depends on them to support a healthy economy and electricity supply. These workers have been a critical part of this nation's economic backbone.



The reason for the job disparity among generation sources is the complexity and labor intensity of nuclear and coal generating plants, including their operation, maintenance, and fuel supply cycles. Renewable energy supplies are capital intensive, but not labor intensive. The coal and nuclear generation sectors, including their fuel and transportation supply chains, provide the type of high-skill, family-supporting jobs necessary to anchor the economy of the local communities associated with this energy infrastructure.

We recognize that renewable energy creates some jobs. Unfortunately, most of these jobs are only in construction, with much smaller numbers in operation and maintenance. In addition, the overwhelming majority of these jobs do not provide wages and benefits sufficient for building economically healthy middle-class communities. The bulk of solar panel manufacturing is done in China and other developing nations. Rooftop solar installation is done domestically, but is not a source of high-paying, middle-class jobs. Simply because a job is in the renewable sector and considered by many a "green job" does not make it a good paying, family-supporting job.

Ohio Case Study

One example of the economic anchoring effect of baseload power can be found in Adams County, Ohio. Dayton Power & Light (DP&L) has announced its intention to close two coal-fired plants: The J.M. Stuart Station (2,400 MW) and Killen Station (600 MW) together employ upwards of 700 people during normal operations, and in excess of 1,000 during outage events, with an annual payroll of \$80 million. For Adams County, these plant closures would mean the loss of \$8.5 million in tax revenue - equivalent to half of the county's general fund revenue. Schools, hospitals, first responder services, local government, all would be forced to severely curtail services, or even close entirely.

In effect, the entire middle-class economy of Adams County depends on the family-supporting jobs in these stations, and all of the directly associated economic activity including transmission, maintenance, parts and equipment, fuel supply, and fuel transportation. The U.S. Department of Commerce estimates that each job in the Ohio electric generation sector creates 3.54 total direct and indirect jobs.³ Despite having spent \$800 million on emissions equipment in 2006, bringing the stations into full EPA compliance, DP&L is now planning to close the plants and walk away from the local economy, triggering a cascade of economic devastation.

NERC Study Supports Critical Need for Baseload Power

The recent NERC reliability study⁴ submitted to you on May 9th raises numerous cautions about the risks of increased dependence on intermittent generation resources, as well as on natural gas. Current market prices for gas could rise in the future, raising electricity rates absent affordable baseload generation remaining online. Price volatility for natural gas is well documented. We fully concur with NERC's observations about the need for greater attention to the critical role played by conventional coal and nuclear baseload generation:

The rapid changes occurring in the generation resource mix and technologies are altering the operational characteristics of the grid and will challenge system planners and operators to maintain reliability. More specifically:

- Impact of Premature Retirements: Conventional units, such as coal plants, provide frequency support services as a function of their large spinning generators and governor-control settings along with reactive support for voltage control. Power system operators use these services to plan and operate reliably under a variety of system conditions, generally without the

³ U.S. Dept. of Commerce, Bureau of Economic Analysis, RIMS II Direct Effect Jobs Multipliers, Table 3.5 (2014).

⁴ National Electric Reliability Council, Synopsis of NERC Reliability Assessments - The Changing Resource Mix and the Impacts of Conventional Generation Retirements (May 2017).

concern of having too few of these services available. Coal-fired and nuclear generation have the added benefits of high availability rates, low forced outages, and secured on-site fuel. Many months of on-site fuel allow these units to operate in a manner independent of supply chain disruptions.

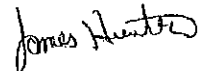
- **Replacement Resource Capability and Characteristics:** As the generation resource mix evolves, the reliability of the electric grid depends on the operating characteristics of the replacement resources. Natural gas-fired units, variable generation, storage, and other resources can provide similar reliability services. However, as a practical matter, costs, market rules, or regulatory requirements (or lack thereof) can affect whether these resources are equipped and available to provide reliability services. To ensure reliability, new generator and load resources must maintain the balance between load and generation, especially during ramping periods. In addition, in some jurisdictions, substantial amounts of generation are now being added “behind the meter” (e.g., roof top solar) and these resources are invisible to system operators. ...

Fuel diversity provides a fundamental benefit of increased resilience. Without this diversity, the impact of rare events impacting availability of resources on the power system increases and are more likely the result of a common-mode failure impacting multiple generation or transmission facilities (e.g., extreme and prolonged cold weather event leads to freezing generator components, transmission line icing, fuel delivery disruption, etc.). **Areas with limited fuel and/or limited resource diversity may be challenged and should increase their attention to resiliency planning**, which requires a strong partnership with state regulators. With natural gas generation primed to continue its growth as the leading choice for new and replacement capacity, important distinctions around fuel security need to be incorporated into reliance and long-term planning at states and with market operators. Mainly, natural gas generation is fueled using just-in-time transportation and delivery, and therefore, is subject to interruption. Roughly 50 percent of natural gas generation resources are considered interruptible, and in constrained natural gas markets these units are not expected to be served during peak pipeline conditions. Many of these plants no longer have the option of burning a liquid fuel. Further, regardless of fuel service arrangements, natural gas generation is subject to curtailment during a force majeure event. (Emphasis in original.)

Unless corrective actions are taken, including new mechanisms that recognize baseload attributes and ensure appropriate compensation for providing the resilience and dependability benefits of baseload coal and nuclear capacity in the electricity marketplace, the long-term viability of these baseload power plants along with the jobs and community economic benefits they bring is in peril.

We encourage the Administration to take prompt and meaningful action to protect baseload coal and nuclear power plants and ensure fuel diversity as the cornerstone of our ability to supply affordable and reliable power to American industry and consumers. Such action is critical to grow our economy and create jobs for the American worker.

Sincerely,



James Hunter
President, UJEP

cc: Brian McCormack

April 20, 2018

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: FirstEnergy Solutions' Request for Emergency Relief under Section 202(c) of the Federal Power Act

Secretary Perry:

Advanced Energy Economy ("AEE") provides the following comments in response to FirstEnergy Solution's ("FE") March 29, 2018 request that the Department of Energy ("DOE") take "emergency" action under Federal Power Act ("FPA") Section 202(c) to direct that certain existing coal and nuclear generators in the PJM Interconnection, L.L.C. ("PJM") region receive extraordinary support, in the form of guaranteed out-of-market compensation.¹

For the reasons discussed below, AEE, on behalf of itself and its members, respectfully urges the Secretary to swiftly reject FE's request. There is no legal basis on which to grant FE's request. Using FPA Section 202(c) in the sweeping manner proposed by FE would be inconsistent with the plain language of the statute, DOE's own regulations, and DOE's prior usage of the statute. Moreover, there is no reliability or resilience emergency in PJM that would justify such unprecedented action, which would upend the operation of the wholesale markets and interfere with established processes for assessing and addressing reliability and resilience concerns.

- **Interests of AEE**

AEE is a national organization of businesses making the energy we use secure, clean, and, affordable. AEE and its state and regional partner organizations, which are active in 27 states across the country, represent more than 100 companies and organizations that span the advanced energy industry and its value chains. Technologies represented include energy efficiency, demand response, natural gas, solar photovoltaics, solar thermal electric, ground-source heat pumps, wind, storage, biofuels, electric vehicles, advanced metering infrastructure, transmission and distribution efficiency, fuel cells, hydro power, nuclear power, combined heat and power, and enabling software. Used together, these technologies and services will create and maintain a higher-performing energy system—one that is reliable and resilient, diverse, cost-effective, and clean—while also improving the availability and quality of customer-facing services. AEE promotes the interests of its members by engaging in policy advocacy at the federal,

¹ AEE reserves the right to supplement these comments and exercise any other rights provided to participants in proceedings under the FPA should DOE open a formal proceeding or otherwise take action on FE's request.

state, and regulatory levels, by convening groups of CEOs to identify and address cross-industry issues, and by conducting targeted outreach to key stakeholder groups and policymakers.

Many of AEE's members either participate directly as competitors in the wholesale electricity markets, including the markets operated by PJM Interconnection, L.L.C. ("PJM"), or are significantly impacted by the outcomes in those markets. AEE is concerned about the impacts that granting FE's request for extraordinary out-of-market cost support would have on the PJM markets and the ability of all energy technologies to compete on a level playing field in those markets. In addition, AEE is troubled by the significant cost increases to ratepayers (including many of AEE's members) that would result from granting FE's request.

- **Motion to Intervene**

AEE does not believe that FE's March 29, 2018 request has become a "proceeding" in which it must intervene and be granted party status to preserve its rights to fully participate under the FPA.² However, out of an abundance of caution, AEE respectfully requests leave to intervene and be granted party status with respect to FE's request. Based on the foregoing statement, AEE submits that it has a significant interest in DOE's resolution of FE's request that cannot be adequately represented by any other party.

- **FE's Requested Use of Section 202(c) Would Be Unlawful, Because There Is No Imminent Reliability or Resilience Emergency Requiring Immediate Action**

The statutory text of Section 202(c), DOE's regulations implementing that text, and relevant judicial precedent all require rejection of FE's request. These authorities all emphasize that the authority granted to DOE by Congress to intervene in the electricity markets to *order* generation resources to produce electric energy – that is, to compel them to operate – is limited to rare instances where an emergency threatens national security or the imminent loss of electricity supply. For example, Section 202(c) itself defines "emergency" narrowly, stating that DOE may exercise its authority to compel production of electricity only in times of "war" or during "sudden" increases in demand or shortages of electricity supply.³ As the D.C. Circuit has explained, this statutory language "speaks of 'temporary' emergencies, epitomized by wartime disturbances, and is aimed at situations in which demand for electricity exceeds supply."⁴ DOE's regulations implementing Section 202(c) similarly define "Emergency" to mean "unexpected . . . events [that] may be the result of weather conditions, acts of God, or unforeseen occurrences not reasonably within the power of the affected 'entity' to prevent."⁵

² For example, DOE has not provided public notice of FE's request, opened notice and comment procedures, or taken any other action on the request. DOE has also stated that its creation of an e-mail repository for comments and materials related to Section 202(c) does not "establish a "docket," and those submitting correspondence do not constitute parties or intervenors to any proceeding." See <https://www.energy.gov/oe/services/electricity-policy-coordination-and-implementation/other-regulatory-efforts/does-use>.

³ 16 U.S.C. § 824(c)(1).

⁴ *Richmond Power & Light v. FERC*, 574 F.2d 610, 615 (D.C. Cir. 1978).

⁵ 10 C.F.R. § 205.371.

There is no emergency in the PJM region that supports taking action under Section 202(c). As PJM and others have demonstrated many times, and as the Federal Energy Regulatory Commission (“FERC”) concluded earlier this year, there are simply no imminent threats to reliability or resilience, nor any sudden increases in demand or decreases in electricity supply anticipated in the PJM region.⁶ The PJM region has more than adequate supply, clearing a 23.9 percent reserve margin in its most recent capacity auction.⁷ DOE’s 2017 “Staff Report to the Secretary on Electricity Markets and Reliability”, in fact, found that the bulk power system is operating reliably and is expected to continue to do so even as the composition of the generation fleet changes.⁸

There is also no severe weather condition, act of God, or unforeseen event impacting the region or FE itself. FE’s request points only to past weather events, all of which were managed effectively with no resulting reliability or resilience emergency.⁹ FE points to a single flawed study claiming that the PJM region would have suffered “interconnect-wide blackouts” if certain coal generation resources had not been available during the recent “Bomb Cyclone” cold weather event.¹⁰ But as PJM and industry analysts have noted, that study fails to recognize that under PJM’s economic dispatch model “PJM dispatched coal units because their costs were lower during certain hours of the cold snap,” not because they provided greater resilience than other availability resources.¹¹ PJM has also provided significant data and analysis to refute the claim that blackouts would have occurred without those coal resources.¹²

FE bases its request primarily on the claim that its coal and nuclear generating assets are not being compensated sufficiently, which is an economic issue. DOE’s regulations, however, state that “economic factors . . . generally will not be considered as emergencies unless the inability to supply electric service is imminent.”¹³ Moreover, the United States Court of Appeals for the District of Columbia Circuit has explained that Section 202(c) is “aimed at situations in which demand for electricity exceeds supply and *not at those in which supply is adequate but a means of fueling its production is in disfavor.*”¹⁴ FE’s request seeks to address financial woes caused by low natural gas prices and the emergence of cost-effective advanced energy technologies that has made its preferred fuel sources less competitive in the wholesale markets. But as Bruce Walker, Assistant Secretary for the Office of Electricity Delivery and

⁶ See, e.g., *Initial Comments of PJM Interconnection, L.L.C. on the United States Department of Energy Proposed Rule*, Docket No. RM18-1-000 (October 23, 2017); *Grid Reliability & Resilience Pricing*, 162 FERC ¶ 61,012 (2018).

⁷ <https://www.pjm.com/~media/markets-ops/rpm/rpm-auction-info/2020-2021-base-residual-auction-report.ashx>

⁸ https://www.energy.gov/sites/prod/files/2017/08/f36/Staff%20Report%20on%20Electricity%20Markets%20and%20Reliability_0.pdf.

⁹ See FirstEnergy Application Request, available at: <https://www.rtoinsider.com/wp-content/uploads/fes-202c-application.pdf>

¹⁰ “Reliability, Resilience and the Oncoming Wave of Retiring Baseload Units, Volume I: The Critical Role of Thermal Units During Extreme Weather Events,” National Energy Technology Laboratory (March 27, 2018).

¹¹ “Perspective and Response of PJM Interconnection to National Energy Technology Laboratories Report Issued March 13, 2018,” PJM Interconnection LLC (April 13, 2018).

¹² *Id.*

¹³ 10 C.F.R. § 205.371.

¹⁴ *Richmond Power & Light*, 574 F.2d at 615.

Energy Reliability correctly observed, Section 202(c) is “not designed” to “stave [off] an economic issue.”¹⁵

FE has also not identified an “imminent” problem. The retirements projected by FE, if they occur, will happen over the course of several months or even years. For example, several of the generators targeted for special treatment in the FE request have capacity supply obligations in PJM extending at least a year into the future. In addition, PJM has specific processes in place to address the potential reliability impacts from plant closures. Retiring generators must provide notice to PJM, which then studies the potential reliability impacts that could occur. If reliability concerns are identified, PJM can offer full cost of service compensation under a “Reliability Must Run” contract to keep those plants online until solutions to the identified reliability issues can be planned and implemented.¹⁶ This process protects the PJM from most “imminent” reliability threats. Granting FE’s request would inappropriately bypass this established process.

Indeed, in its request FE appears to concede it is asking for assistance that Section 202(c) simply does not contemplate. For example, FE notes that DOE’s implementing regulations do not address the “emergency” that FE has identified,¹⁷ and states that it cannot provide much of the information required by those regulations.¹⁸

- **Granting FE’s Request Would be Inconsistent with DOE’s Prior Use of Section 202(c)**

Granting FE’s request here would be a significant departure from DOE’s past practice. DOE has used its Section 202(c) authority only eight times since 2000. For example, DOE deployed the emergency measure following Hurricane Katrina and Hurricane Ike to ensure that essential services were restored after the devastating storms. Last year, DOE issued two Section 202(c) orders, in both cases to ensure that specific plants were available to meet short-term reliability needs. In one case, continued operation of a single plant was required on a temporary to provide reactive power after severe weather damaged to other plants in the areas, resulting in a short term shortage of reactive power support in the region.¹⁹ In the other, units in PJM were required to run on a short-term basis (approximately six months) to provide specific reliability services needed by PJM until transmission reinforcements could be completed.²⁰

In contrast, FE’s request here would compel the operation of a loosely defined set of coal and nuclear plants on a long-term basis (four years) to address ill-defined threats to “fuel security and diversity,” “energy security and reliability,” and “grid dependability and resiliency.” FE’s request fails to identify any specific generating units that are needed for reliability, or the specific reliability issues that

¹⁵ See, e.g., <https://www.politico.com/newsletters/morning-energy/2018/03/30/all-eyes-on-perry-after-first-energy-move-154378>.

¹⁶ http://www.cleveland.com/business/index.ssf/2018/03/power_grid_manager_pjm_to_doe.html.
<http://www.pjm.com/planning/services-requests/gen-deactivations.aspx>.

¹⁷ See FE Application at 27, n. 169.

¹⁸ *Id.* at 27-31.

¹⁹ Federal Power Act Section 202(c) – Grand River Dam Authority, April 2017

²⁰ Federal Power Act Section 202(c) – PJM Interconnection & Dominion Energy Virginia, 2017

would result from their imminent closure, as applicants have in all prior cases where DOE has utilized its Section 202(c) authority. For these reasons, DOE should decline to use that authority here.

- **Granting FE's Request Would Threaten to Unravel the Competitive Wholesale Markets that Congress and FERC Have Sought to Foster, And Would Undermine Energy Technology Innovation in Those Markets**

For decades, it has been the policy of Congress and FERC to utilize market-based mechanisms to increase competition in the wholesale power markets and ensure just and reasonable rates as the FPA requires. FERC has, with the approval of Congress, fostered the development of Regional Transmission Organizations and Independent System Operators ("RTOs/ISOs") like PJM, which independently administer markets for wholesale energy and other wholesale electricity products across the country. While these markets are by no means perfect, they have been successful in ensuring reliability and just and reasonable rates while encouraging significant energy technology innovation. The Brattle Group found that PJM's markets have created a more efficient and reliable grid, despite widespread retirements of coal plants. Brattle stated that PJM, despite these retirements, passed that so-called "stress test . . . with no evident threat to reliability."²¹

Competitive markets have allowed for numerous technologies to enhance the reliability and resilience of the grid particularly during times of stress. PJM credited wind and demand response with helping to maintain reliability during the 2014 Polar Vortex, and after the devastating Hurricane Irma in 2017, utilities called upon DR to help maintain grid stability.^{22,23}

Markets also embrace the innovation of advanced energy technologies, which have significant operational and reliability benefits to offer the grid that may be superior to traditional thermal generation, such as the resources in question in FE's request. For example, some advanced energy technologies, such as battery storage, are "instant on," and because of their distributed nature, can immediately provide support to specified areas of the grid in a reliability emergency.

Market-based mechanisms necessarily create winners and losers, which means retirement for inefficient resources. FE's request would interfere with the operation of those mechanisms by providing certain technologies with preferential, cost-based compensation determined outside of those markets. The presence of so many resources with cost-based rates would distort market outcomes and discriminate against other technologies in the marketplace, putting them at a competitive disadvantage, while increasing costs to consumers and denying them the cost-reduction and technology-innovation benefits of robust competition among a variety of suppliers. Propping up resources that can no longer economically

²¹ Letter to U.S. Government Accountability Office in response to U.S. Senators' Capacity Market Questions, Brattle Group (May 5, 2017).

²² Petition for Rehearing En Banc Of PJM Interconnection, L.L.C., Electric Power Supply Ass'n v. FERC at 10-11, No. 11-1486 (D.C. Cir. July 7, 2014)

²³ <https://energysmart.enernoc.com/following-hurricane-irma-demand-response-stepped-amid-efforts-restore-power>

compete ultimately harms ratepayers and directly undermines FERC's ability to meet its statutory obligation to ensure just and reasonable rates.

As DOE knows, FERC recently opened a new proceeding to examine long-term resilience in the RTO/ISO markets.²⁴ In the absence of any credible demonstration of an immediate threat to reliability or resilience, FERC should be allowed to continue its exploration of long-term resilience and develop a record that will allow it to find approaches to addressing resilience problems that continue to rely on technology-neutral market-based mechanisms.

Conclusion

For the foregoing reasons, AEE respectfully requests that DOE reject FE's request for action under FPA Section 202(c). Thank you for your attention to these comments.

Please feel free to reach out to either Malcolm Woolf, SVP of Policy (mwoolf@aee.net, 202-391-0678) or Maria Robinson, Director of Wholesale Markets (mrobinson@aee.net, (b) (6)) with any follow-up questions or comments.

²⁴ See *Grid Reliability & Resilience Pricing*, 162 FERC ¶ 61,012 (2018).

From: Cone, Travis (Capito)
To: AskOE
Subject: 202(c) petition
Date: Friday, April 20, 2018 2:35:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[May 2017 Capito Statement.pdf](#)
[10062017 FERC Commissioners on DoE Grid Reliability Baseload Power NOPR SIGNED.pdf](#)

To whom it may concern,

I am writing on behalf of Senator Capito to express her support for the Department of Energy taking measures to ensure grid resilience and reliability by protecting baseload coal and nuclear assets from distortionary market forces.

I have attached a letter led by the Senator and signed by the West Virginia House delegation to then-FERC Chairman Chatterjee in support of the Secretary's NOPR on the issue and a press release on the same subject.

The Senator has also communicated support for the targeted use of Federal Power Act Section 202c authority in this arena via letter to and conversation with President Trump.

Thanks for your consideration.

Sincerely,

Travis Cone

C. Travis Cone

Legislative Assistant

Senator Shelley Moore Capito (R-WV)
172 Russell Senate Office Building (SR-172)
Washington, DC 20515
202-224-6472

travis_cone@capito.senate.gov



CAPITO ENCOURAGED BY ENERGY SECRETARY'S ELECTRIC GRID STUDY

WASHINGTON, D.C. — U.S. Senator Shelley Moore Capito (R-W.Va.) today applauded U.S. Department of Energy Secretary Rick Perry's decision to initiate a study of the nation's electric grid, specifically examining the impact regulatory burdens have had on base load power sources, as well as the importance of fuel diversity in ensuring grid reliability. The study was initiated Friday and will continue over a two-month period.

"I am encouraged by Secretary Perry's decision to study the reliability of our energy grid," said Senator Capito. "If we are going to have affordable, reliable energy that powers our economy and advances our quality of life, we must maintain an adequate supply of base load electricity that is always available when it is needed. There is a role for multiple energy sources, including our own West Virginia coal and natural gas, as well as nuclear and renewables. But there is a clear difference between intermittent energy sources and base load power. A diversity in fuel sources and technologies is essential for a reliable and properly functioning electric grid. I am glad that the Department of Energy, under the new administration, recognizes that our coal, natural gas, and nuclear plants are vital assets in ensuring that affordable energy is always available to meet the needs of the American people."

###

Congress of the United States
Washington, DC 20515

October 6, 2017

Chairman Neil Chatterjee
Commissioner Cheryl A. LaFleur
Commissioner Robert F. Powelson
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

RE: Docket No. RM18-1-000, Grid Reliability and Resilience Pricing

Dear Chairman Chatterjee, Commissioner LaFleur, and Commissioner Powelson,

As members of the congressional delegation representing the state of West Virginia, we write you expressing our support for the Secretary of Energy's direction to the Federal Energy Regulatory Commission to issue grid resiliency pricing rules recognizing the value of fuel-secure baseload resources in the organized power markets within the jurisdiction of the Commission. We encourage the Commission to expeditiously and affirmatively direct the regional transmission organizations (RTOs) and independent operators (ISOs) to recognize the value of these fuel-secure electric generation sources to the grid's reliability and fuel security through cost-recovery for eligible units by utilizing the authorities granted to it by Congress in Sections 205 and 206 of the Federal Power Act.

West Virginia is an interstate energy exporter, sending more than half of its net electricity production across state lines through the PJM Interconnection, the nation's largest RTO. According to the Energy Information Administration (EIA), this makes West Virginia one of the top five states in net interstate sales of electricity. Additionally, the EIA finds that West Virginia is the second largest coal producer in the country, with three-quarters of that production going to other states.¹ As a result the state has a key role to play in our nation's energy infrastructure, generating fuel-secure baseload power for itself and its neighbors and providing additional fuel for other states' baseload electric generation generators.

We believe this integration of West Virginia into the national electric grid is a strength for both the state and the nation. However, in recent years historically high production and resulting low prices of natural gas, significant regulatory burdens, and market-distorting preferential subsidies and mandates for renewable sources have led to coal-fired power being unable to compete in regional electric markets. The nuclear industry is facing similar challenges. The result has been the closure and proposed closure of hundreds of coal and several nuclear generating units; as the Department of Energy noted in its Notice of Proposed Rulemaking

¹ EIA, "West Virginia State Profile and Energy Estimates." July 20, 2017. Accessed September 29, 2017.
<https://www.eia.gov/state/analysis.php?sid=WV>

(NOPR), some 63.7 gigawatts (GW) of coal and nuclear generation capacity was retired between 2002 and 2016, with another 25 GW slated for retirement in coming years.

The retirement of these units poses challenges to the grid's reliability and resilience, has implications for national security, and will put pricing challenges on consumers if market fundamentals shift. The current price advantages of natural gas and subsidized renewable energy in the electric markets are the result of volatile market forces and impermanent federal policies. While these fuel sources have important roles for providing fuel diversity and competitively priced intermittent and interruptible electricity, they do not provide the fuel-secure baseload electricity upon which American citizens and our economy depend.

As their name implies baseload resources can operate at nearly 100 percent capacity at all times, providing a consistent floor of supply in the marketplace and reducing volatility. Coal and nuclear plants also have months of on-site fuel resources, making them resilient to conventional and cyberattacks on pipeline infrastructure and giving them a greater deal of certainty in wholesale electricity prices.

Recent events, such as the 2014 Polar Vortex, demonstrate the risk to the resiliency of RTOs like PJM due to a loss of fuel-secure generation capacity and the lack of availability of variable generation resources. During the Polar Vortex, a potentially catastrophic blackout during a record and persistent cold weather event was only avoided because coal units then scheduled for retirement remained available to be brought back online to meet demand. If present trends continue those resources will not be available during a future capacity crunch. Those units have since retired.

These advantages of fuel-secure electric generation sources must not be taken for granted; yet the organized power markets are doing just that. Short-term marginal fuel price, regulatory overburden, subsidy, and policy mandate advantages for intermittent sources have rendered many baseload units uneconomical. Recognizing the threats posed by the loss of these key baseload resources, state governments such as Illinois and New York have implemented policies to prevent additional closures of coal and nuclear units. However, the interstate nature of the electric markets requires federal action. During the capacity auction process, the organized electric markets must acknowledge the importance of a reliable and resilient electric grid by compensating baseload resources for providing these functions.


The Commission is the federal agency best-suited to addressing these challenges. As you know, the Commission has studied the threats the loss of baseload generation capacity poses to the grid since 2013. FERC's unique authorities under Sections 205 and 206 of the Federal Power Act enable the Commission to address the market's undervaluation of baseload electricity by authorizing cost recovery for eligible fuel-secure baseload generation units within organized electric markets under the Commission's oversight.

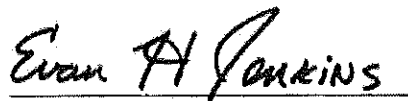
We support the Secretary's NOPR and encourage the Commission to take an affirmative final action to protect the reliability and resiliency of the nation's electric grid. Doing so is imperative for protecting the economy and security of West Virginia and the rest of the United

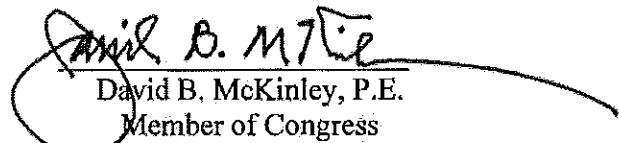
States and following through on congressional intent to maintain an all-of-the-above national energy policy.

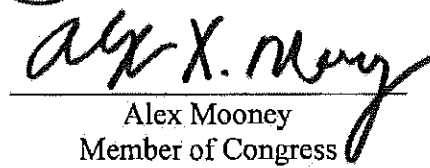
Thank you for your timely consideration of this request.

Sincerely,


Shelley Moore Capito
United States Senator


Evan Jenkins
Member of Congress


David B. McKinley, P.E.
Member of Congress


Alex Mooney
Member of Congress

CC: The Honorable Rick Perry; Secretary,
Department of Energy



Document 112

April 18, 2018

President Donald J. Trump
The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20500

RE: Request for Emergency Order By FirstEnergy Solutions Corp. Under Federal Power
Act Section 202(c)

Dear Mr. President:

On behalf of DuPont, I am pleased to offer the following comments opposing FirstEnergy Solutions (FES) Corp.'s Request to the Department of Energy (DOE) for issuance of an Emergency Order under Section 202(c) of the Federal Power Act.

DuPont has numerous facilities in the PJM region that employs approximately 15,000 individuals, providing significant economic benefits to these states and the nation. As you know, higher energy and regulatory costs threaten the competitiveness of American job creators, industries, manufacturers, producers, and large industrial users. Higher energy prices also create an economic burden on our employees, and all consumers, in this region.

Section 202(c) of the Federal Power Act is confined to a limited scope of emergencies and imminent events. Section 202(c) solutions are temporary, targeted, and narrowly tailored and it is a power that has only previously been used during national emergencies and wartime. FES is inappropriately using Section 202(c) for internal economic reasons to bail out its failing assets.

The scope of the requested Emergency Order is unprecedented, overbroad, and conflicts with existing statutory and regulatory authority. The request is inconsistent with DOE's prior emergency orders. The request improperly asks DOE to take action that is reserved for the Federal Energy Regulatory Commission's (FERC) ratemaking authority. The request seeks relief that does not constitute "just and reasonable" compensation under the Federal Power Act.

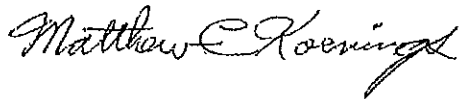
FES's Request also ignores decades of FERC precedent by requesting that PJM customers be forced to pay cost-based, non-market rates for power from FES's uneconomic nuclear and coal facilities. FES requests a return based on the full value of its assets, even when shareholders have already benefitted from writing down those same assets.

Granting the Request would be a government attempt to pick winners and losers undermining the competitive forces at play in wholesale electricity markets.

There is no looming emergency in the PJM region which requires a federal response. Very healthy electricity capacity reserves are available throughout the region targeted by the Request. Mechanisms and standards are in place to ensure reliable delivery of electricity. Energy prices are currently reflecting lower prices for natural gas and other electric generation fuels. An emergency order from the Department of Energy would be unnecessary, an overstep of authority and unlawful.

On behalf of Dupont, and our thousands of employees who will be affected by it, I strongly recommend that the Request be denied.

Sincerely,



Matthew C. Koenings
Vice-President — Corporate Operations

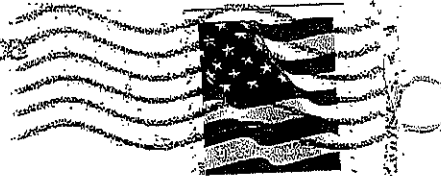
Cc: The Honorable James Richard Perry, Secretary, Department of Energy
The Honorable Lawrence Kudlow, Assistant to the President for Economic Policy & NEC
Director

AMERICAN
OVERSIGHT

DuPont
974 Centre Road
Wilmington, DE 19805

CAPITAL DISTRICT 20585

19 APR 2018 PM 3:1



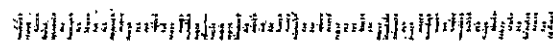
Received

APR 23 2018

MAIL SANITIZED

The Honorable James Richard Perry
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585.

20585-



DOE-17-0427-B-001660

From: Harbin, Christine
To: AskOE; Jereza, Catherine; Lotto, Adrienne; Walker, Bruce
Subject: FW: RGGI impact on PJM prices
Date: Tuesday, April 24, 2018 5:06:03 PM
Attachments: Petition to DOE for study on the Impact of RGGI on PJM Wholesale Prices.docx
RGGI Reduces Efficiency at Power Plants and Raises Emissions.docx
scr cost manual spreadsheet 2016 vf.xlsm

FYI from the Caesar Rodney Institute Center for Energy Competitiveness

From: David Stevenson [mailto:davidstevenson1948@gmail.com]

Sent: Tuesday, April 24, 2018 4:15 PM

To: Harbin, Christine

Subject: RGGI impact on PJM prices

Chrissy,

Please see the attached petition to study the impacts of RGGI on PJM wholesale electric rates, and two associated documents. Thank you in advance for your help.

David T. Stevenson

Director, Center for Energy Competitiveness

Caesar Rodney Institute

Cell Phone (b) (6)

Sent from Mail for Windows 10



Caesar Rodney Institute
Center for Energy Competitiveness
PO Box 7619
Wilmington, DE 19803
WWW.CaesarRodney.org

Christine Harbin
Senior Advisor for External Affairs
Room 8G-024
U. S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

4/24/2018

Dear Chrissy,

In my e-mail of April 11, I shared a report on how the Regional Greenhouse Gas Initiative (RGGI) was reducing operating hours at coal-fired power plants by raising cost to cover carbon dioxide emission allowances, and making the plants less competitive in the PJM Regional Transmission Organization region. The report also showed how fewer operating hours has resulted in 13 percent lower operating efficiency, and I attach the report here again.

The latest RGGI auction is adding about \$4.17/megawatt-hour to coal-fired Electric Generating Units (EGUs) in Delaware and Maryland. In addition, an Environmental Protection Agency spreadsheet calculates the cost to run Selective Catalytic Reduction (SCR) pollution control equipment under various operating conditions (also attached). Since RGGI began, the SCR operation costs may have risen by \$2.45/megawatt-hour, and increased coal usage may have added another \$0.54, for a grand total of \$7.16/megawatt-hour in added costs. This is a significant amount considering the average PJM Delmarva Zone wholesale price in 2017 was \$35/megawatt-hour.

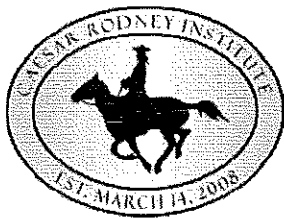
Assuming those higher costs are included in Clearing Price bids for the PJM Locational Marginal Price plan, these higher costs may be raising electricity costs for the entire PJM region as every EGU in the system receives the same Clearing Price, including the eleven non-RGGI states. Electricity pricing reverberates through our economy impacting U. S. competitiveness, jobs, and especially the poorest among us. Other PJM states are considering entering RGGI, so the cost impact may rise.

PJM keeps records of the winning EGUs in the LMP auction, but the published results are coded to protect confidential information. I am petitioning the DOE to work with PJM to answer the following questions:

- 1) On a monthly, and annual average, what percentage of the time are fossil fuel EGUs in Delaware and Maryland setting the Clearing Price for each hour of the day for the period 2015 through 2017?
- 2) If possible, compare this information for the three main fossil fuels; coal, petroleum liquids, and natural gas powered EGUs?
- 3) What impact are Delaware and Maryland EGU Clearing Price bids having on the annual average LMP?

Please direct this request to the appropriate individuals at DOE, and thank you so much for your assistance.

David T. Stevenson
Director, Center for Energy Competitiveness
Caesar Rodney Institute
e-mail: DavidStevenson@CaesarRodney.org
Phone: (b) (6)



Inside Energy

Published by the Caesar Rodney Institute
Center for Energy Competitiveness

RE: Carbon dioxide cap and trade dramatically lower power plant efficiency, and increase emissions

DATE : 4/11/2018

David T. Stevenson, Director

Experience with the nine state Regional Greenhouse Gas Initiative (RGGI) has shown it may actually increase emissions at power plants forced to purchase emission allowances by lowering operating efficiency by turning base load power plants into load followers with intermittent operation. I calculate a 13% decline in efficiency from lower operating hours, compared to a potential 6% gain from all energy efficiency strategies in the Clean Power Plan.

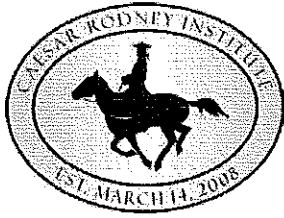
Merchant coal-fired Electric Generating Units (EGU) in two RGGI states, Delaware and Maryland, in the PJM Interconnection Regional Transmission Organization were reviewed. Table 1 provides the combined operating information for coal-fired Chalk Point, MD units 1 and 2, Dickerson, MD, units 1, 2, and 3, and Indian River, DE unit 4.

Table 1: Operating Information for six coal-fired EGU's in MD and DE

Year	MMBTU	MWh	Tons CO2	Heat Rate	tons CO2/MWh	Operating Hours	Efficiency
2009	77,892,841	8,339,131	7,985,161	9341	0.958	40750	36.5%
2010	83,006,579	8,492,233	8,721,474	9774	1.027	41701	34.9%
2011	62,291,965	5,759,548	6,390,655	10815	1.110	32428	31.5%
2012	43,386,334	4,108,110	4,401,386	10561	1.071	26261	32.3%
2013	51,535,606	4,745,005	5,280,418	10861	1.113	30877	31.4%
2014	48,906,883	4,480,833	5,141,322	10915	1.147	26898	31.3%
2015	27,507,453	2,394,986	2,621,515	11485	1.095	15534	29.7%
2016	27,930,508	2,335,968	2,816,511	11957	1.206	16466	28.5%

Source: MMBTU, Ton CO2, and operating hours are from RGGI COATS at <https://rggi-coats.org/eats/rggi/index.cfm?hc=ISkgICAK>, MWh are from US Energy Information Agency Form 923 at <https://www.eia.gov/electricity/data/eia923/>, other columns calculated

Graph 1 uses information from Table 1, and shows how increasing RGGI emission allowance prices reduce operating hours. Coal-fired generation in non-RGGI states continued at about twice the RGGI state average.

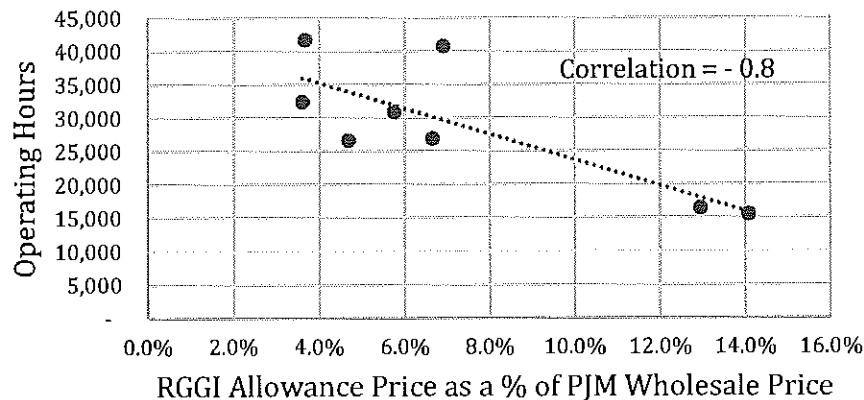


Inside Energy

Published by the Caesar Rodney Institute
Center for Energy Competitiveness

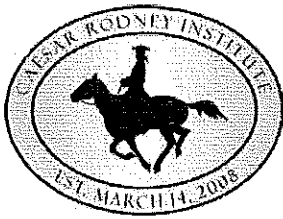
Graph 1

DE/MD Merchant Coal-Fired Generating Units Operating Hours vs. RGGI Allowance Cost



Graph 2 also uses information from Table 1, and shows operating efficiency falls approximately 18.5% when operating hours are cut 60%. In the Clean Power Plan estimates of potential energy efficiency improvements totaled about 6%, so the impact of lower operating hours is about three times as large as all other energy efficiency improvements combined! Lower operating efficiency increases CO₂ emissions. The Indian River Power Plant in Delaware saw a 32% rise in emissions per MWh from 2012 when each MWh emitted 0.87 tons of CO₂ to 2017 when each MWh emitted 1.15 tons. More coal was used to produce each MWh.

Lower operating hours over the period has two probable sources; the rapidly falling fuel cost of natural gas compared to coal, and the added cost of carbon dioxide emission allowances. According to the US Energy Information 2017 Agency Annual Energy Outlook, the national average Capacity Factor for coal-fired EGUs, the actual operating hours compared to potential operating hours, for coal-fired EGUs dropped from 65.1% in 2009 to 51% in 2016, or about 1235 hours in reaction to lower natural gas prices. Average operating hours at the six EGU's in Maryland and Delaware fell 4048 hours between 2009 and 2016. So, the ratio of hours lost because of lower natural gas prices to RGGI allowance cost is about 30% to 70%. Therefore, RGGI accounted for about a 13% decline in energy efficiency at the six EGU's (18.5% X 70%). EPA should consider expanding this study beyond six operating units.

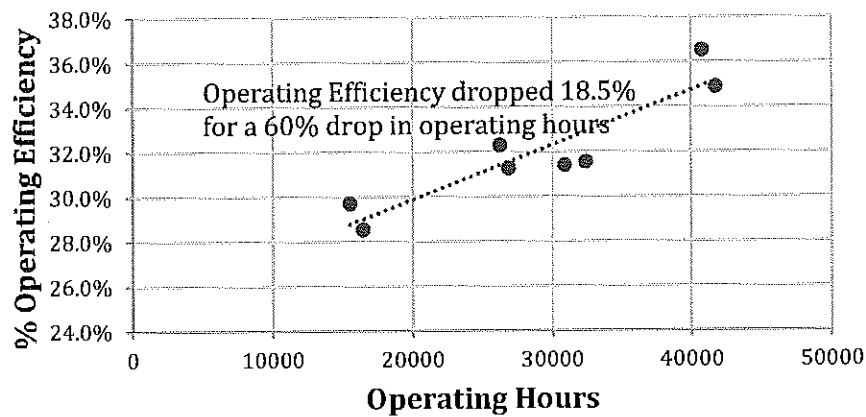


Inside Energy

Published by the Caesar Rodney Institute
Center for Energy Competitiveness

Graph 2

Six Merchant Coal Fired Power Plants in MD & DE Operating Efficiency v. Operating Hours



Cost Estimate

Total Capital Investment (TCI)

TCI for Coal-Fired Boilers

For Coal-Fired Boilers:

$$TCI = 1.3 \times (SCR_{cost} + RPC + APHC + BPC)$$

Capital costs for the SCR (SCR_{cost}) =	\$87,796,113
Reagent Preparation Cost (RPC) =	\$3,955,890
Air Pre-Heater Costs (APHC)* =	\$9,276,189
Balance of Plant Costs (BPC) =	\$7,215,176
Total Capital Investment (TCI) =	\$140,716,379

* This factor applies because the boiler burns bituminous coal and emits equal to or greater than 3lb/MMBtu of sulfur dioxide.

SCR Capital Costs (SCR_{cost})

For Coal-Fired Utility Boilers >25 MW:

$$SCR_{cost} = 270,000 \times (NRF)^{0.2} \times (B_{MW} \times HRF \times CoalF)^{0.92} \times ELEVF \times RF$$

For Coal-Fired Industrial Boilers >250 MMBtu/hour:

$$SCR_{cost} = 270,000 \times (NRF)^{0.2} \times (0.1 \times Q_B \times CoalF)^{0.92} \times ELEVF \times RF$$

SCR Capital Costs (SCR_{cost}) =

Reagent Preparation Costs (RPC)

For Coal-Fired Utility Boilers >25 MW:

$$RPC = 490,000 \times (NO_{x,in} \times B_{MW} \times NPHR \times EF)^{0.25} \times RF$$

For Coal-Fired Industrial Boilers >250 MMBtu/hour:

$$RPC = 490,000 \times (NO_{x,in} \times Q_B \times EF)^{0.25} \times RF$$

Reagent Preparation Costs (RPC) =

Air Pre-Heater Costs (APHC)*

For Coal-Fired Utility Boilers >25MW:

$$APHC = 69,000 \times (B_{MW} \times HRF \times CoalF)^{0.78} \times AHF \times RF$$

For Coal-Fired Industrial Boilers >250 MMBtu/hour:

$$APHC = 69,000 \times (0.1 \times Q_B \times CoalF)^{0.78} \times AHF \times RF$$

Air Pre-Heater Costs (APHC_{cost}) =

* This factor applies because the boiler burns bituminous coal and emits equal to or greater than 3lb/MMBtu of sulfur dioxide.

Balance of Plant Costs (BPC)

For Coal-Fired Utility Boilers >25MW:

$$BPC = 460,000 \times (B_{MW} \times HRF \times CoalF)^{0.42} \times ELEVF \times RF$$

For Coal-Fired Industrial Boilers >250 MMBtu/hour:

$$BPC = 460,000 \times (0.1 \times Q_B \times CoalF)^{0.42} \times ELEVF \times RF$$

Balance of Plant Costs (BOP_{cost}) =

Annual Costs

Total Annual Cost (TAC)

$$TAC = \text{Direct Annual Costs} + \text{Indirect Annual Costs}$$

Direct Annual Costs (DAC) =	\$4,090,330
Indirect Annual Costs (IDAC) =	\$11,350,077
Total annual costs (TAC) = DAC + IDAC	\$15,440,407

Direct Annual Costs (DAC)

$$DAC = (\text{Annual Maintenance Cost}) + (\text{Annual Reagent Cost}) + (\text{Annual Electricity Cost}) + (\text{Annual Catalyst Replacement Cost})$$

Annual Maintenance Cost =	$0.005 \times TCI =$
Annual Reagent Cost =	$q_{sol} \times \text{Cost}_{reag} \times t_{op} =$
Annual Electricity Cost =	$P \times \text{Cost}_{elect} \times t_{op} =$
Annual Catalyst Replacement Cost =	

For coal-fired boilers, the following methods may be used to calculate the catalyst replacement cost.

Method 1 (for all fuel types): $n_{scr} \times Vol_{cat} \times (CC_{replace}/R_{layer}) \times FWF$

Method 2 (for coal-fired utility boilers): $B_{MW} \times 0.4 \times (CoalF)^{2.9} \times (NRF)^{0.71} \times (CC_{replace}) \times 35.3$

Direct Annual Cost =

Indirect Annual Cost (IDAC)

$$IDAC = \text{Administrative Charges} + \text{Capital Recovery Costs}$$

Administrative Charges (AC) =	$0.03 \times (\text{Operator Cost} + 0.4 \times \text{Annual Maintenance Cost}) =$
Capital Recovery Costs (CR) =	$CRF \times TCI =$
Indirect Annual Cost (IDAC) =	$AC + CR =$

Cost Effectiveness

$$\text{Cost Effectiveness} = \text{Total Annual Cost} / \text{NOx Removed/year}$$

Total Annual Cost (TAC) =	\$15,440,407
NOx Removed =	5,553
Cost Effectiveness =	\$2,780

[REDACTED]

[REDACTED]

[REDACTED]

in 2014 dollars
in 2014 dollars
in 2014 dollars
in 2014 dollars
in 2014 dollars

[REDACTED]

\$87,796,113 in 2014 dollars

[REDACTED]

\$3,955,890 in 2014 dollars

[REDACTED]

\$9,276,189 in 2014 dollars

[REDACTED]

\$7,215,176 in 2014 dollars

[REDACTED]

[REDACTED]

in 2014 dollars
in 2014 dollars
in 2014 dollars

talyst Cost)

\$703,582 in 2014 dollars
\$2,598,379 in 2014 dollars
\$539,055 in 2014 dollars
\$249,314 in 2014 dollars

* Calculation Method 1 selected.

\$4,090,330 in 2014 dollars

[REDACTED]

\$10,250 in 2014 dollars
\$11,339,827 in 2014 dollars
\$11,350,077 in 2014 dollars

[REDACTED]

[REDACTED]

per year in 2014 dollars
tons/year
per ton of NOx removed in 2014 dollars

From: Hrkman, Lou
To: AskOE
Subject: Submittal
Date: Tuesday, April 24, 2018 10:33:12 AM
Attachments: [image001.png](#)
[WV Republicans.pdf](#)
[May 2017 Capito Statement.pdf](#)
[May 2017 Jenkins - WV Rep - Letter to DOE.PDF](#)
[May 2017 McKinley - WV Rep - Letter to DOE.PDF](#)

Document 114

Please include for the record

Lou Hrkman

Policy Adviser

Congressman David B. McKinley, P.E. (WV-01)

2239 Rayburn House Office Building

Washington, DC 20515

(202) 225-4172



Congress of the United States
Washington, DC 20515

October 6, 2017

Chairman Neil Chatterjee
Commissioner Cheryl A. LaFleur
Commissioner Robert F. Powelson
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

RE: Docket No. RM18-1-000, Grid Reliability and Resilience Pricing

Dear Chairman Chatterjee, Commissioner LaFleur, and Commissioner Powelson,

As members of the congressional delegation representing the state of West Virginia, we write you expressing our support for the Secretary of Energy's direction to the Federal Energy Regulatory Commission to issue grid resiliency pricing rules recognizing the value of fuel-secure baseload resources in the organized power markets within the jurisdiction of the Commission. We encourage the Commission to expeditiously and affirmatively direct the regional transmission organizations (RTOs) and independent operators (ISOs) to recognize the value of these fuel-secure electric generation sources to the grid's reliability and fuel security through cost-recovery for eligible units by utilizing the authorities granted to it by Congress in Sections 205 and 206 of the Federal Power Act.

West Virginia is an interstate energy exporter, sending more than half of its net electricity production across state lines through the PJM Interconnection, the nation's largest RTO. According to the Energy Information Administration (EIA), this makes West Virginia one of the top five states in net interstate sales of electricity. Additionally, the EIA finds that West Virginia is the second largest coal producer in the country, with three-quarters of that production going to other states.¹ As a result the state has a key role to play in our nation's energy infrastructure, generating fuel-secure baseload power for itself and its neighbors and providing additional fuel for other states' baseload electric generation generators.

We believe this integration of West Virginia into the national electric grid is a strength for both the state and the nation. However, in recent years historically high production and resulting low prices of natural gas, significant regulatory burdens, and market-distorting preferential subsidies and mandates for renewable sources have led to coal-fired power being unable to compete in regional electric markets. The nuclear industry is facing similar challenges. The result has been the closure and proposed closure of hundreds of coal and several nuclear generating units; as the Department of Energy noted in its Notice of Proposed Rulemaking

¹ EIA, "West Virginia State Profile and Energy Estimates." July 20, 2017. Accessed September 29, 2017. <https://www.eia.gov/state/analysis.php?sid=WV>

(NOPR), some 63.7 gigawatts (GW) of coal and nuclear generation capacity was retired between 2002 and 2016, with another 25 GW slated for retirement in coming years.

The retirement of these units poses challenges to the grid's reliability and resilience, has implications for national security, and will put pricing challenges on consumers if market fundamentals shift. The current price advantages of natural gas and subsidized renewable energy in the electric markets are the result of volatile market forces and impermanent federal policies. While these fuel sources have important roles for providing fuel diversity and competitively priced intermittent and interruptible electricity, they do not provide the fuel-secure baseload electricity upon which American citizens and our economy depend.

As their name implies baseload resources can operate at nearly 100 percent capacity at all times, providing a consistent floor of supply in the marketplace and reducing volatility. Coal and nuclear plants also have months of on-site fuel resources, making them resilient to conventional and cyberattacks on pipeline infrastructure and giving them a greater deal of certainty in wholesale electricity prices.

Recent events, such as the 2014 Polar Vortex, demonstrate the risk to the resiliency of RTOs like PJM due to a loss of fuel-secure generation capacity and the lack of availability of variable generation resources. During the Polar Vortex, a potentially catastrophic blackout during a record and persistent cold weather event was only avoided because coal units then scheduled for retirement remained available to be brought back online to meet demand. If present trends continue those resources will not be available during a future capacity crunch. Those units have since retired.

These advantages of fuel-secure electric generation sources must not be taken for granted; yet the organized power markets are doing just that. Short-term marginal fuel price, regulatory overburden, subsidy, and policy mandate advantages for intermittent sources have rendered many baseload units uneconomical. Recognizing the threats posed by the loss of these key baseload resources, state governments such as Illinois and New York have implemented policies to prevent additional closures of coal and nuclear units. However, the interstate nature of the electric markets requires federal action. During the capacity auction process, the organized electric markets must acknowledge the importance of a reliable and resilient electric grid by compensating baseload resources for providing these functions.


The Commission is the federal agency best-suited to addressing these challenges. As you know, the Commission has studied the threats the loss of baseload generation capacity poses to the grid since 2013. FERC's unique authorities under Sections 205 and 206 of the Federal Power Act enable the Commission to address the market's undervaluation of baseload electricity by authorizing cost recovery for eligible fuel-secure baseload generation units within organized electric markets under the Commission's oversight.

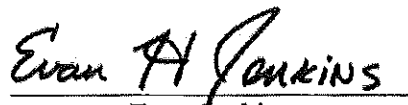
We support the Secretary's NOPR and encourage the Commission to take an affirmative final action to protect the reliability and resiliency of the nation's electric grid. Doing so is imperative for protecting the economy and security of West Virginia and the rest of the United

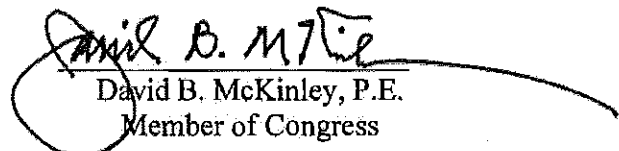
States and following through on congressional intent to maintain an all-of-the-above national energy policy.

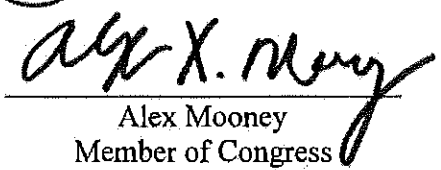
Thank you for your timely consideration of this request.

Sincerely,


Shelley Moore Capito
United States Senator


Evan Jenkins
Member of Congress


David B. McKinley, P.E.
Member of Congress


Alex Mooney
Member of Congress

CC: The Honorable Rick Perry; Secretary,
Department of Energy

CAPITO ENCOURAGED BY ENERGY SECRETARY'S ELECTRIC GRID STUDY

WASHINGTON, D.C. — U.S. Senator Shelley Moore Capito (R-W.Va.) today applauded U.S. Department of Energy Secretary Rick Perry's decision to initiate a study of the nation's electric grid, specifically examining the impact regulatory burdens have had on base load power sources, as well as the importance of fuel diversity in ensuring grid reliability. The study was initiated Friday and will continue over a two-month period.

"I am encouraged by Secretary Perry's decision to study the reliability of our energy grid," said Senator Capito. "If we are going to have affordable, reliable energy that powers our economy and advances our quality of life, we must maintain an adequate supply of base load electricity that is always available when it is needed. There is a role for multiple energy sources, including our own West Virginia coal and natural gas, as well as nuclear and renewables. But there is a clear difference between intermittent energy sources and base load power. A diversity in fuel sources and technologies is essential for a reliable and properly functioning electric grid. I am glad that the Department of Energy, under the new administration, recognizes that our coal, natural gas, and nuclear plants are vital assets in ensuring that affordable energy is always available to meet the needs of the American people."

###

Congress of the United States
Washington, DC 20515

May 11, 2017

Dear Secretary Perry:

We commend you on your leadership at the Department of Energy (DOE) to highlight the importance of the nation's electric grid resilience. Your actions thus far have been well received by many of our constituents, and we support your efforts to prioritize the DOE's core missions.

It has come to our attention that you recently initiated a 60-day study exploring the long-term reliability of the electric grid, noting specifically that there is "concern about how certain policies are affecting, and potentially putting at risk, energy security and reliability". This study will be especially timely as Congress takes up comprehensive tax reform, crafts an energy infrastructure package, and considers the fiscal year 2018 budget. The input of the DOE on policy areas such as grid reliability, market incentives, and subsidies for particular types of energy production will be critical as we debate changes to the energy and tax landscape.

There are notable concerns among industry stakeholders that today's energy and electricity markets have been distorted by outdated and unnecessary incentives and subsidies. For example, it was recently noted by the U.S. Energy Information Administration that tax credits have made some types of energy production outlandishly competitive due to their subsidies – in some cases, even below the prevailing market rates of comparable energy sources.

Today's power generation mix provides us with an abundant variety of domestic energy sources. These provide our various states and regions the flexibility to tailor their electricity generation capacity to meet the demands of American businesses and families. Affordable and reliable energy is a key concern for our domestic manufacturers, enabling them to compete and thrive in the global marketplace. In order to optimize the economic efficiency of the electric grid and ensure the wise use of taxpayer dollars, we recommend your study include proposals that review the impact of leveling the disparity in tax credits and subsidies with the comparative costs of energy generation.

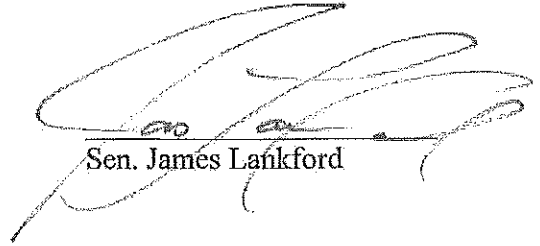
Additionally, we urge you to consider the national security implications of incentivizing specific types of energy generation. The vital role that baseload power plants, especially those with fuel readily available onsite, play in grid reliability and resiliency is an essential component of sound energy policy. These plants are the backbone of the nation, and carry our power system through extended emergencies like the Polar Vortex that impacted the United States in late 2013 to early 2014. Unfortunately, these plants are closing at a rapid pace, and many more are at risk of closure in the near future. Whether in response to natural disasters, extreme weather, or national security emergencies, being able to ensure we have adequate baseload power during times of critical demand should be a prime objective of your Department's review.

Thank you for your consideration of our recommendations. If you have any questions, please do not hesitate to contact our offices at (202) 225-3452 or (202) 224-5754.

Sincerely,

A handwritten signature in black ink, appearing to read "Evan Jenkins", written over a horizontal line.

Rep. Evan Jenkins

A handwritten signature in black ink, appearing to read "James Lankford", written over a horizontal line.

Sen. James Lankford

DAVID B. MCKINLEY, P.E.

1ST DISTRICT, WEST VIRGINIA

2233 RAYBURN HOUSE OFFICE BUILDING

WASHINGTON, DC 20515

TEL: (202) 225-4172

FAX: (202) 225-7584

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COMMITTEE ON
ENERGY AND COMMERCE

SUBCOMMITTEE ON
ENVIRONMENT

VICE CHAIR

SUBCOMMITTEE ON
ENERGY

SUBCOMMITTEE ON

DIGITAL COMMERCE AND CONSUMER PROTECTION

Congress of the United States House of Representatives

May 8, 2017

CHAIRMAN,
CONGRESSIONAL COAL CAUCUS
CO-CHAIR,
CONGRESSIONAL BUILDING TRADES CAUCUS
CO-CHAIR,
CONGRESSIONAL ANTHRACITE CAUCUS
CO-CHAIR,
CONGRESSIONAL YOUTH CHALLENGE CAUCUS
CO-CHAIR,
HIGH PERFORMANCE BUILDINGS CAUCUS
CO-CHAIR,
CONGRESSIONAL HEARING HEALTH CAUCUS

The Honorable Scott Perry
Secretary
U.S. Department of Energy
1000 Independence Avenue S.W.
Washington, DC 20585

Dear Secretary Perry:

On behalf of the Congressional Coal Caucus, which represents thousands of coal miners, their families, and the millions of Americans who depend on coal for affordable and reliable electricity, I want to applaud you and the Department of Energy (DOE) for your April 14, 2017, memorandum that initiated an important and timely analysis of electricity markets and grid reliability.

This issue has been a priority for the Coal Caucus and on September 23, 2016, the attached letter was sent to the Federal Energy Regulatory Commission (FERC) expressing concerns that competitive markets do not adequately compensate baseload power generation and urging the Commission to investigate this matter.

As you know, electricity consumers throughout the country depend on a safe, reliable, and affordable supply of power. Baseload power plants – especially those with fuel security (fuel on site, coal) – are critical to meeting this need and ensuring the reliability and resiliency of our nation's grid. We especially need these power plants to carry the power system through extended emergencies, like we saw during the Polar Vortex in 2014. But, coal plants have been closing at a rapid pace and many more are very much at-risk. Therefore, it is imperative that we identify why these critical power generators are closing and develop policies to prevent further closures and ensure long-term grid resiliency, reliability and energy security.

Again, thank you for initiating this DOE study and look forward to working with you on this matter. Should your staff have any questions, do not hesitate to reach out to my Policy Advisor, Blake Deeley, by phone (202) 225-4172 or by email at blake.deeley@mail.house.gov.

Sincerely,



David B. McKinley, P.E.

Chairman, Congressional Coal Caucus

From: Joyce
To: [AskOIE](#)
Cc: iron549@comcast.net
Subject: FW: Federal Power Act Section 202 (c)
Date: Tuesday, April 24, 2018 2:41:49 PM
Attachments: [Federal Power Act Section 202.pdf](#)

Good afternoon,
Please find attached a letter we filed in the past in support of baseload generation, and we urge you to issue an emergency order pursuant to Federal Power Act Section 202 (c).

Respectfully submitted,

Bengy Swanson
Iron Workers Local 549
Ph: (304) 232-2660
Fax: (304) 232-0340
iron549@comcast.net

Iron Workers Local Union No. 549

A.F.L. - C.I.O.

KELLY DIERKES
President

2350 Main Street

304-232-2660 • FAX: 304-232-0340

Wheeling, WV 26003

BENGY SWANSON
Business Manager
Fin. Secretary-Treasurer

October 19, 2017

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

Re: Grid Resiliency Pricing Rule
FERC Docket No. RM18-1-000

COMMENTS OF THE IRON WORKERS LOCAL UNION NO. 549 IN SUPPORT OF THE PROPOSED RESILIENCY RULE

On September 28, 2017, the Department of Energy ("DOE") issued the "Grid Resiliency Pricing Rule" (the "Proposal") directing the Federal Energy Regulatory Commission ("FERC") to adopt a rule requiring operators of organized markets to "ensure that certain reliability and resiliency attributes of electric generation sources are fully valued." Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in West Virginia will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

The Iron Workers Local Union No. 549 strongly supports the Proposal and shares the Secretary's urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members' loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC

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has the requisite basis to act now. There is no time for delay. In addition to acting promptly, FERC should also direct organized market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Bengy Swanson
Business Manager/ F.S.T.
Iron Workers Local Union No. 549
2350 Main Street, Wheeling, WV 26003
304-232-2660
iron549@comcast.net

II. DESCRIPTION OF IRON WORKERS LOCAL 549

International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers.

III. DESCRIPTION OF IRON WORKERS LOCAL 549'S INTEREST IN PROCEEDING

The Iron Workers Local Union No. 549 is a party to a collective bargaining agreement with the owners of baseload coal and nuclear power plants located in West Virginia. Our members work on major infrastructure and industrial development projects that are dependent on the continued operation of the baseload coal and nuclear power plants. As a result, the wages, terms and conditions of employment of its members may be directly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, the Iron Workers Local 549 members have a direct and substantial interest in this proceeding. As well, the unique perspective

of the Iron Workers Local Union No. 549 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in West Virginia electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across West Virginia. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in West Virginia provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to Iron Workers Local Union No. 549 members. For example, AEP Mitchell Power Station, First Energy Harrison Power Station, Ft. Martin Power Station directly employs approximately 50 people, and the maintenance and capital improvement work on these plants supports the local economy by creating well-paying union jobs. In addition, the AEP Mitchell Power Station, First Energy Power Station, Ft. Martin Power Stations contribute millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive economy in two ways. First, the preservation of certain plants will avoid the need to

replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed, reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled (and specifically trained and experienced) employees, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in West Virginia, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, the [insert shortened name or acronym] strongly urges FERC to adopt the rule proposed by the DOE as promptly and comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by the comments considered in this proceeding. FERC has thoroughly considered the impact of electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of pre-mature closures.

In acting promptly, FERC should also direct the organized market operators to issue a rule that is not only compensatory (and based on the regulatory language of the Proposal) but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

Respectfully submitted,



Bengy Swanson
Business Manager/F.S.T.
Iron Workers Local Union No.549

From: Caitlin Marquis
To: [AskOE](#)
Subject: Advanced Energy Buyers Group Comments RE: DOE's Use of FPA Emergency Authority
Date: Wednesday, April 25, 2018 5:11:53 PM
Attachments: [Advanced Energy Buyers Group Comments re FPA 202\(c\) 04 25 18.pdf](#)

Secretary Perry,

I am pleased to submit the attached comments from the [Advanced Energy Buyers Group](#), a coalition of large energy users, in response to the Department of Energy's [request for input](#) on the use of its authority under Section 202(c) of the Federal Power Act.

Please do not hesitate to reach out to me if you have any questions or would like to follow up with the AE Buyers Group.

Respectfully,

Caitlin Marquis

--

Caitlin Marquis
Manager, Federal and State Policy
Advanced Energy

Buyers Group *The policy voice of advanced energy purchasers*

Email: cmarquis@aee.net

mobile: (b) (6)

Web: www.AEE.net | Twitter: [@AEEEnet](https://twitter.com/AEEEnet)

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ADVANCED ENERGY BUYERS GROUP

the policy voice of advanced energy purchasers

Advanced Energy Buyers Group Comments Re: Federal Power Act (FPA) § 202(c)

Submitted to AskOE@hq.doe.gov

April 25, 2018

COMMENTS OF THE ADVANCED ENERGY BUYERS GROUP

The Advanced Energy Buyers Group (“AE Buyers Group” or “Group”) appreciates the opportunity to provide brief comments to the Department of Energy (“DOE” or “Department”) in response to the recent request from FirstEnergy Solutions (“FES”), specifically regarding the Department’s potential use of its Federal Power Act (“FPA”) § 202(c) authority.¹

The AE Buyers Group strongly urges DOE against use of its § 202(c) authority in this case because doing so is inconsistent with the statute, would be an unlawful departure from its prior use, and would undermine competitive wholesale markets while raising electricity prices at the cost of electricity consumers such as our companies. Furthermore, we note that there is no reliability or resilience emergency in PJM Interconnection (“PJM”) that warrants emergency

¹ These comments represent the consensus view of the Advanced Energy Buyers Group (<https://info.aee.net/ae-buyers-group>). However, this document does not necessarily reflect the position of any specific member of the AE Buyers Group, and these comments should not be attributed to any individual company or companies participating in the AE Buyers Group.

government intervention, and that even if any reliability or resilience concerns were to be identified as a result of FES's announced plant retirements, PJM already has many tools at its disposal to respond to such threats, and ample time to do so.

ABOUT THE AE BUYERS GROUP

The Advanced Energy Buyers Group is a business-led coalition of large energy users engaging on policies to expand opportunities to procure energy that is secure, clean, and affordable. Our companies are among the 71% of Fortune 100 companies and 43% of Fortune 500 companies that have established renewable and/or climate targets as part of our corporate sustainability commitments. Members of the AE Buyers Group are leading companies and organizations spanning a range of market sectors. We share a common interest in expanding our use of advanced energy, such as renewable energy like wind, solar, geothermal, and hydropower; demand-side resources like energy efficiency, demand response, and energy storage; and onsite generation from solar photovoltaics, advanced natural gas turbines, and fuel cells.

In 2017, members of the AE Buyers Group totaled over \$1 trillion in revenue and collectively consumed over 18 terawatt hours ("TWh") of electricity, including over 11 TWh hours of renewable electricity, equivalent to the electricity sales for the states of North Dakota and Delaware, respectively. This collective electricity use includes a significant footprint in the PJM region.

MOTION TO INTERVENE

The AE Buyers Group is not aware of any formal "proceeding" to consider FES's March 29, 2018 request that would require intervention (and granting of party status) to preserve its rights to fully participate under the FPA. Nevertheless, as a precaution and to preserve our rights in any

ongoing or future proceeding, the AE Buyers Group respectfully requests leave to intervene and be granted party status with respect to FES's request. Given the significant footprint of the AE Buyers Group in the PJM region and the unique perspective of the Group as described above, the AE Buyers Group submits that it has a significant interest in this matter that cannot be adequately represented by any other party.

COMMENTS

The AE Buyers Group is extremely concerned that FES's request would violate DOE's authority and disrupt wholesale markets at the expense of consumers, while ignoring readily available options to address any reliability or resilience concerns that are found to exist. The AE Buyers Group's comments are organized as follows:

- I. Granting FES's request would undermine competitive markets at significant cost to consumers;
- II. FES's request has not met the statutory requirements of § 202(c), and granting the request would be a significant and unlawful departure from DOE's prior use of the statute;
- III. There is no imminent resilience or reliability emergency in the PJM market, as PJM itself has made clear; and
- IV. Existing tools in the PJM market are available and more appropriate to identify and address any reliability or resilience challenges posed by retirement of FES's plants.

These comments are explained in more detail below.

- I. Granting FES's request would undermine competitive markets at significant cost to consumers.**

FES's request is fundamentally antithetical to the principles of competitive markets, and granting this request would increase costs and undermine market competition in the near-term while also setting a dangerous precedent and reducing confidence in the federal government's commitment to the principles of competition in wholesale electricity markets.

In particular, the AE Buyers Group is concerned that granting FES's request—which appears to be intended to apply to its entire fleet and to all other coal and nuclear plants in PJM, not just the plants slated for retirement—would disrupt the core function of competitive wholesale markets and undermine competition by limiting the ability of these markets to send accurate price signals and drive optimal, cost-effective market outcomes.² This approach is inconsistent with long-standing efforts by federal regulators and policymakers to maintain and improve the competitive wholesale markets, and would result in direct harm to our companies along with many other customers.

Wholesale markets have been very successful at accurately discovering the value of electricity production and sending efficient price signals to generators and consumers to deliver the most cost-efficient market supply outcomes. The cost-saving benefits of competitive wholesale markets have been confirmed by independent analysis, and by regional transmission organizations (“RTOs”) and independent system operators (“ISOs”), including PJM.³ Clear and accurate prices

² While the AE Buyers Group notes that providing more limited relief just to the plants slated for retirement would have a smaller financial impact, the Group wishes to emphasize that there would still be a financial cost. Even more importantly, this more limited application would have the same effect of undermining confidence in markets and setting an extremely troubling precedent.

³ See Steve Cicala, *Imperfect Markets versus Imperfect Regulation in U.S. Electricity Generation*, University of Chicago (Jan. 2017), available at http://home.uchicago.edu/~scicala/papers/elec_gov_v_mkt_draft_2.pdf, concluding, “markets reduce production costs by \$3B per year by reallocating output among existing power plants,” with some of these savings coming from a 20% reduction in the cost of operating uneconomic plants due to a 10% reduction in utilization; PJM Interconnection, *PJM Value Proposition*, <http://www.pjm.com/about-pjm/value-proposition.aspx>, estimating a \$2.8 to \$3.1 billion net annual benefit to customers from PJM's operation of the competitive regional wholesale market, including \$600 million in annual savings due to enabling “less efficient generation resources to retire and to be replaced with more efficient, less costly, plants”; and, MISO, *Value*

in a stable policy environment are critical to enabling the development and deployment of new energy technologies that help advance economic growth while still meeting customer needs for electricity that is both reliable and resilient. Allowing cost-of-service-based regulation and undue emergency relief into this market system would, in contrast, undermine the accuracy of these price signals and result in inefficient market outcomes.

Further, in addition to our perspective as consumers highly dependent on a reliable, resilient, and affordable supply of electricity, our companies are also active participants in the wholesale electricity system, pursuing clean energy projects to meet our corporate energy and sustainability targets and to control our electricity costs. In the competitive wholesale markets regulated by FERC, we are taking full advantage of the choice afforded to us as customers to pursue long-term contracts with advanced energy installations. By inserting new cost-based rates into existing wholesale markets, and by providing cost-of-service support for uneconomic units without material benefit to the energy system, FES's request would create distortionary effects that will directly harm our existing energy supply contracts and limit our ability to pursue such transactions in the future.

Any effort to respond to and address potential threats to grid reliability and resilience should make use of market principles to encourage innovation and competition, calling upon the full suite of available options and allowing cost and performance to serve as the metric for success.

Proposition, <https://www.misoenergy.org/WhatWeDo/ValueProposition/Pages/ValueProposition.aspx>, finding that in 2016 MISO, "provided between \$2.6 billion and \$3.3 billion in regional benefits, driven by enhanced reliability, more efficient use of the region's existing transmission and generation assets, and a reduced need for new assets."

II. FES's request has not met the statutory requirements of § 202(c), and granting the request would be a significant and unlawful departure from DOE's prior use of the statute.

The Federal Power Act sets very specific limitations on DOE's use of § 202(c), which have not been met in this case. Specifically, § 202(c) allows DOE to intervene in the electricity industry only during an emergency that threatens national security, specifically defined as times of "war" or during "sudden" increases in demand or shortages of supply,⁴ with "emergency" defined as "unexpected . . . events [that] may be the result of weather conditions, acts of God, or unforeseen occurrences not reasonably within the power of the affected "entity" to prevent."⁵ DOE's implementing regulations specifically note that "economic factors . . . generally will not be considered as emergencies unless the inability to supply electric service is imminent."⁶ Even where 202(c) authority is found to be justified, this authority extends only to the "hours necessary to meet the emergency."⁷

None of these statutory requirements have been met in FES's request. The FES retirement announcements will not go into effect for a matter of years, and cannot be reasonably interpreted as a "sudden" shortage of supply or an instance in which "the inability to supply electric service is imminent."

As such, granting FES's request would represent a significant disregard for the statutory requirements, and would also be a significant departure from DOE's prior use of its 202(c)

⁴ 16 U.S.C. § 824(c)(1).

⁵ 10 C.F.R. § 205.371.

⁶ *Id.*

⁷ 16 U.S.C. § 824(c)(2).

authority, which has been limited to specific emergency events (e.g., Hurricanes Katrina and Ike) and specific plants over specified periods (in response to extreme circumstances, i.e., lightning and flooding that interrupted plant construction). The FES request does not bear any resemblance to these prior uses of DOE's 202(c) authority. The AE Buyers Group sees no evidence in the statute that FES's request is within DOE's authority.

III. There is no imminent resilience or reliability emergency in the PJM market, as PJM itself has made clear.

Members of the AE Buyers Group include technology companies, manufacturers, and retailers—all sectors heavily reliant upon a reliable and resilient source of electricity. Our companies require a steady supply of electricity on a 24-hour basis, 365 days a year, and we pay a significant price for breaks in service, whether they be small disturbances to the distribution system or large outages of the bulk power system. Estimates place the cost of infrastructure failures for large enterprises at \$100,000 per hour, and for many of our businesses the costs are much higher.⁸

Given our dependence upon reliable and resilient electricity, and the consequences to our businesses of a loss of electricity supply, we carefully monitor and analyze any threats to this supply, and support necessary and cost-effective investments or actions to maintain a reliable electricity system. While there can always be incremental improvements in reliability and resilience, it is our view as engaged and highly invested consumers that FES's announced plant retirements do not present an imminent threat to reliability and resilience in PJM.

⁸ Eaton, *Blackout Tracker: United States Annual Report 2016* (2017), available at <http://electricalsector.eaton.com/forms/BlackoutTrackerAnnualReport>, at 6.

Numerous recent assessments of the reliability and resilience of the bulk power system (“BPS”) have concluded that the state of the electricity system is sound, and that it is successfully adjusting to a shifting resource mix. For example, the North American Electric Reliability Corporation (“NERC”) recently reached the overarching conclusion that the state of the electricity system is sound. At a hearing before the House Subcommittee on Energy in September 2017, NERC President and Chief Executive Officer Gerry Cauley testified that “even with all the changes underway, the BPS remains highly reliable and resilient, showing improved reliable performance year over year.”⁹ He also expressed confidence that the system would continue to perform well despite changes to the generation mix, stating, “With appropriate insight, careful planning, and support, I am confident the electricity sector will continue to navigate these changes in a manner that results in enhanced reliability and resilience.”¹⁰

Of particular importance here, we note that PJM itself made clear to DOE that FES’s announced plant retirements do not threaten grid reliability or resilience. In a letter to the Secretary dated March 30, PJM wrote: “PJM can state *without reservation* there is no immediate threat to system reliability” (emphasis added).¹¹ This unequivocal assessment by PJM clearly indicates that use of § 202(c) authority in response to FES’s request would be unjustified.

⁹ Gerry W. Cauley, Direct Testimony before the Subcommittee on Energy, House Committee on Energy and Commerce, “Powering America: Defining Reliability in a Transforming Electricity Industry” (Sept. 14, 2017), available at <http://www.nerc.com/news/Documents/HEC9-14-17%20Cauley%20Testimony%20Final.pdf>, at 1.

¹⁰ *Id.*

¹¹ Vincent P. Duane, Letter to Secretary Perry Re: FirstEnergy Solutions’ Request for Emergency Relief under Section 202 of the Federal Power Act (March 30, 2018), <http://www.pjm.com/-/media/documents/other-fed-state/20180330-response-to-fe-solutions-request-for-emergency-relief.ashx>.

IV. Existing tools in the PJM market are available and more appropriate to identify and address any reliability or resilience challenges posed by retirement of FES's plants.

The announced FES plant retirements do not pose an imminent threat, and PJM has tools to identify and address any reliability or resilience challenges posed by these retirements, as well as ample time to deploy them. Application of such tools offers a more appropriate response to FES's announced retirements—one that relies on routine implementation of PJM's established authority rather than what would be, as PJM describes it, “unnecessary, extraordinary and precedential” action on behalf of FES.

In particular, PJM notes that the plants slated for retirement “will remain operational in most cases until through May 2021,” and that the retirements are not binding. In the meantime, PJM plans to follow an orderly and routine process to assess the impact of these retirements, which it outlines in its March 30 letter to the Secretary:

“PJM will undertake a thorough analysis of its system to determine whether the announced retirements would present systemic adequacy issues or any local reliability issues, such as insufficient voltage support. Should any such finding result, the PJM Tariff provides an additional 60 days to work with FES and a range of tools available, including ordering transmission system upgrades and, if necessary, offering full cost of service compensation under Part V of the PJM Tariff to induce assets to remain temporarily on-line. Ultimately, PJM could also join FES in its instant request should other remedial options prove insufficient.”¹²

The AE Buyers Group is satisfied that PJM is already taking steps to assess any threats to the reliability and resilience of our electricity service, and that there is sufficient time between now and the retirement of FES's plants to implement any necessary corrective measures. In the

¹² *Id.*

meantime, we see no justification for intervention by DOE that would short-circuit PJM's established process.

CONCLUSION

The AE Buyers Group appreciates the opportunity to provide input on FES's request, and we respectfully request DOE's consideration of our perspective in this case.

Signed,

The Advanced Energy Buyers Group

<https://info.aee.net/ae-buyers-group>

From: huntoon@comcast.net
To: [AskOE](#)
Subject: Supplemental Comments on FirstEnergy Request
Date: Wednesday, April 25, 2018 9:41:24 AM
Attachments: [The Surreal, the Absurd and the Tragic](#) RTO Insider 4-25-18.pdf

Dear Secretary and Department,
Supplementing my previously submitted comments, attached is my column published today by *RTO Insider* providing additional evidence as to why the Secretary and Department should deny FirstEnergy's request.
Respectfully submitted,
Stephen L. Huntoon

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COUNTERFLOW: The Surreal, the Absurd and the Tragic Edit

(<https://www.rtoinsider.com/wp-admin/post.php?post=91238&action=edit>)

April 24, 2018

By Steve Huntoon

The Surreal

I'd like to apologize — on behalf of FirstEnergy — for dragging countless congressmen into the arcane world of the electric utility industry. You've had to listen to millionaire lobbyists — the quintessential swamp — talking about stuff so dry that we who toil in this world aren't allowed to talk to our spouses about it.

And biggest apology to Sen. Manchin because you re the biggest victim. Bailout for FirstEnergy via the Defense Production Act of 1950? OMG.

Do you think if there were a scintilla of national security threat we might have heard something from, hmm, let s see, maybe the Defense Department?

But here we are.

If you're just listening to FirstEnergy's lobbyists, you've missed a few key facts. FirstEnergy's plants are:^[1]

- Not base load.
- Old – not retiring prematurely.
- Inefficient.
- Unreliable.
- Not needed for a reliable and resilient grid.

In the tough competition for weakest bailout argument, the winner is the argument that if we didn't have all the coal plants we had last winter, there would have been an electricity problem, which is like saying if we didn't have all the Fords we had last winter, there would be a car problem. Duh.

All the Fords aren't disappearing overnight. And the Fords that do disappear are being replaced by better Fords.

A weaker argument for subsidizing old, inefficient and unreliable plants is hard to imagine. If it had prevailed 100 years ago, we'd still be driving Model T's.

Quick Quiz

Let's see if you've been conned with a quick quiz question: The Department of Energy projects in the year 2050, 32 years from now, there will be this much coal and nuclear generation in the United States:

1. 0 gigawatts
2. 10 gigawatts
3. 100 gigawatts
4. 274 gigawatts

The answer is (d) 274 gigawatts.^[2] Yes, Rick Perry's own Department of Energy projects a huge amount of coal and nuclear generation to be around for the *next 32 years*.



(https://i0.wp.com/www.rtoinsider.com/wp-content/uploads/Steve-Huntoon-content-14-1.jpg?ssl=1)

Hun oon

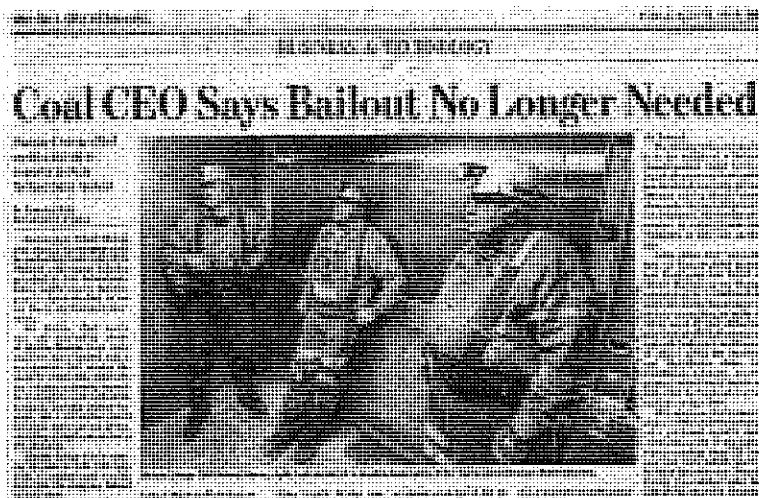
It's a con to pretend coal and nuclear plants will disappear quickly (or at all), causing any sort of reliability problem — and to premise a bailout on such fantasy.

The Absurd

The absurd is that all the responsible entities in the electric industry know there is no emergency. All the independent grid operators, the unanimous Federal Energy Regulatory Commission (where four of the five Commissioners are Trump appointees), former federal regulators, and all the independent analysts have repeatedly said that. These would be the first to warn of an emergency if one actually existed.

Compounding the absurdity, earlier this month FirstEnergy told the bankruptcy court that all its coal and nuclear plants would be operating throughout its bankruptcy proceeding.^[3] That proceeding will take at least five to six years.^[4]

That means all the FirstEnergy plants will be operating for at least the next five or six years.



(<https://i1.wp.com/www.rtoinsider.com/wp-content/uploads/WSJ-Murray-story-excerpt-content.jpg?ssl=1>)

On top of that, Robert Murray, coal CEO and FirstEnergy's fellow traveler, told *The Wall Street Journal* earlier this month there was no longer any need for a bailout to save his company from bankruptcy because of increased exports to Asia.^[5] He now "expects his company to thrive whether or not the Trump administration intervenes," the *Journal* reported.

There is no fire. Or even a puff of smoke.

The Tragic

FirstEnergy's customers paid it \$6.9 billion in return for the company's transition from a regulated environment to a competitive environment. If that "bet" had turned out well, FirstEnergy would, of course, have kept the money. It hasn't gone as well as FirstEnergy anticipated, and now FirstEnergy wants customers to bail them out all over again.

I didn't realize just how outrageous that was until poring through the record of FirstEnergy's stranded cost proceeding in Ohio from almost 20 years ago. FirstEnergy's stranded costs were based on the difference between their regulated "net book value" and their net revenues in the future under market conditions.

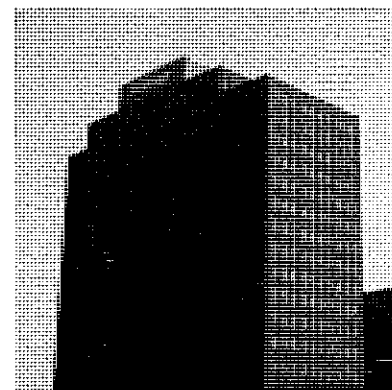
Please bear with me. "Net book value" is the original cost of the plants reduced by the amount of capital that customers already have reimbursed the utility (a.k.a., depreciation). So, when FirstEnergy was paid net book value (less the future market revenues it would get to keep), it was paid the rest of the plant costs that customers hadn't already paid for.

In other words, customers have already paid for 100% of FirstEnergy's plants. FirstEnergy may retain legal title, but in equity the customers own the plants.

Can you imagine the tragedy of customers having to pay for those old, inefficient and unreliable plants all over again?

Let's hope a surreal and absurd bailout and a tragic rate increase don't come to pass. And if they do, let's hope voters figure out who's responsible.

1. A lot of this is common knowledge in the industry. For my own takes, the non-base load, old and inefficient nature of these plants is discussed here: <http://www.energy-counsel.com/docs/Clunker-Poster-Child.pdf> (<http://www.energy-counsel.com/docs/Clunker-Poster-Child.pdf>). The unreliable nature of these plants is discussed here: <http://www.energy-counsel.com/docs/Cash-for-Clunkers-Redux-RTO-Insider.pdf> (<http://www.energy-counsel.com/docs/Cash-for-Clunkers-Redux-RTO-Insider.pdf>).



(<https://i2.wp.com/www.rtoinsider.com/wp-content/uploads/FirstEnergy-HQ-Wikipedia-FI-1.jpg?ssl=1>)

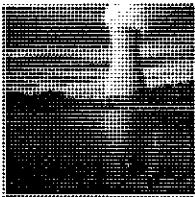
FirstEnergy's Akron, Ohio headquarters

Redux-RTO-Insider.pdf). The lack of need for these plants is discussed here: http://www.energy-counsel.com/docs/Counterflow_More-Smoking-Guns-for-the-Clunkers_RTO-Insider.pdf (http://www.energy-counsel.com/docs/Counterflow_More-Smoking-Guns-for-the-Clunkers_RTO-Insider.pdf). ↑

2. <https://www.eia.gov/todayinenergy/detail.php?id=35572> (<https://www.eia.gov/todayinenergy/detail.php?id=35572>) (for coa , 195 gigawatts); <https://www.eia.gov/outlooks/aeo/pdf/AEO2018.pdf> (<https://www.eia.gov/outlooks/aeo/pdf/AEO2018.pdf>) (page 43, for coa , 79 gigawatts) ↑
3. <https://www.usnews.com/news/best-states/ohio/articles/2018-04-04/utility-says-power-plants-will-stay-open-during-bankruptcy> (<https://www.usnews.com/news/best-states/ohio/articles/2018-04-04/utility-says-power-plants-will-stay-open-during-bankruptcy>) ↑
4. <https://www.ohio.com/akron/business/breaking-news-business/firstenergy-solutions-bankruptcy-could-take-years-consumer-impact-review-begins> (<https://www.ohio.com/akron/business/breaking-news-business/firstenergy-solutions-bankruptcy-could-take-years-consumer-impact-review-begins>) ↑
5. <https://www.wsj.com/articles/robert-murray-says-trump-administrations-help-not-needed-to-save-his-coal-company-1523570164?mod=searchresults&page=1&pos=3> (<https://www.wsj.com/articles/robert-murray-says-trump-administrations-help-not-needed-to-save-his-coal-company-1523570164?mod=searchresults&page=1&pos=3>) ↑



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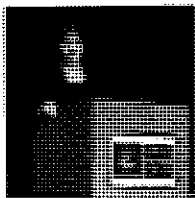


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Counterflow -- Clunkers Shoot Selves in Foot

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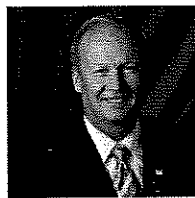
Supporters of the DOE NOPR have promoted an insane rush to judgment, according to columnist Steve Huntton. Duke Energy



(<https://www.rtoinsider.com/pjm-2020-1113/>)

PJM Kicks Off Grid 20/20 Conference (<https://www.rtoinsider.com/pjm-2020-1113/>)

PJM CEO Terry Boston and Federal Energy Regulatory Commission Chery LaFleur kicked off PJM's third annual Grid 20/20 conference in Philadelphia last night.



(<https://www.rtoinsider.com/pjm-members-committee-preview-26313/>)

PJM Members Committee Preview

(<https://www.rtoinsider.com/pjm-members-committee-preview-26313/>)

A summary of the issues scheduled to be brought to a vote at the Members Committee on Thursday during PJM's Annual Meeting.

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(https://www.rtoinsider.com/pjm-doe-maria-korsnick-nuclear-energy-institute-nei-90288/) NEI CEO: FirstEnergy Emergency Request a 'Bridging Strategy' (https://www.rtoinsider.com/pjm-doe-maria-korsnick-nuclear-energy-institute-nei-90288/)

(https://www.rtoinsider.com/ercot-energy-efficiency-amory-ovins-90486/) Lovins: We're Only Scratching the Surface on Energy Efficiency (https://www.rtoinsider.com/ercot-energy-efficiency-amory-ovins-90486/)

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Have Questions?

Anti-spam: what does the "R" in RTO stand for?

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From: kbradley@ibew29.org
To: [AskOE](#)
Subject: Baseload Generation
Date: Wednesday, April 25, 2018 3:54:26 PM
Attachments: [Beaver valley letter 1.pdf](#)
[Beavey Valley 2.pdf](#)

I am writing to you today to show our continued support for baseload generation which includes both nuclear and coal-fired units, these types of plants give this country the most electrical stability and resiliency possible. These plants have fuel onsite to keep them operational for many months at a time and are very dependable and are critical in maintaining the power needed to run this great country. We urge you to issue an emergency order pursuant to Federal Power Act Section 202(c).

Respectfully

Kenn Bradley

IBEW 29

Business Manager

INTERNATIONAL BROTHERHOOD of ELECTRICAL WORKERS LOCAL UNION 29

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May 15, 2017

Secretary Perry
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Dear Secretary Perry,

Unions, labor and power plant workers across the country applaud the Department of Energy's study examining electricity markets, the value of baseload power and the long-term security and resiliency of the electric grid. Baseload coal and nuclear power plants employ more than 154,000 workers, produce major infrastructure projects that put Americans to work, and support a resilient electric grid. Local Union 29 represents over 500 of these power plant workers in Western Pennsylvania that work in nuclear and coal plants.

Baseload power plants have long been the "work horses" of the electric system, providing energy to customers 24 hours a day, 365 days a year. With significant on-site fuel reserves, they provide the resiliency required to keep electricity flowing under all circumstances since their operation is not subject to interruption by extreme events such as weather or attacks on infrastructure that disrupt fuel delivery to other generation resources. Recently, EPA Administrator Pruitt noted as much when he talked about the consequences of an attack on key infrastructure. Our nation's security is dependent on maintaining these plants to support a resilient supply of electricity.

However, numerous baseload power plants have permanently shut down in recent years, and many more are expected to close prematurely in the very near future. Once they are gone, they are gone for good. Baseload generation is under serious threat from market-distorting subsidies and mandates, regulations that target these resources, low natural gas prices and markets that don't value resiliency. We are at a crisis point. Further decline in the number of plants will not only impact the grid and national security, it will cost valuable jobs and discourage industrial development opportunities nationwide. This is an outcome America simply can't afford.

Our baseload power plants and the dedicated, skilled workers who operate them are the lifeblood of their communities. They deliver a strong tax base and support between three and eight times more high-paying jobs than do other forms of electricity generation. We depend on these plants to create a robust workforce, and the country depends on them to support a healthy economy and electricity supply.

Unless action is taken, the long-term viability of baseload power plants along with the jobs and substantial economic opportunities they bring is at risk. And, our national security could be compromised if we don't ensure a resilient grid. We encourage the Administration to take prompt and meaningful action to protect baseload power plants and America's energy future.

Sincerely,


Jeff Davis
Business Manager

AMERICAN
OVERSIGHT

October 17, 2017

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

Re: Grid Resiliency Pricing Rule
FERC Docket No. RM18-1-000

**COMMENTS OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL
WORKERS, LOCAL UNION 29 IN SUPPORT OF THE PROPOSED RESILIENCY
RULE**

On September 28, 2017, the Department of Energy (“DOE”) issued the “Grid Resiliency Pricing Rule” (the “Proposal”) directing the Federal Energy Regulatory Commission (“FERC”) to adopt a rule requiring operators of organized markets to “ensure that certain reliability and resiliency attributes of electric generation sources are fully valued.” Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in Pennsylvania will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

IBEW Local 29 strongly supports the Proposal and shares the Secretary’s urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members’ loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC has the requisite

basis to act now. There is no time for delay. In addition to acting promptly, FERC should also direct organized market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Kenn Bradley
Business Mgr.
IBEW Local 29
986 Greentree Road, Pittsburgh, PA 15220
412-922-6969
kbradley@ibew29.org

II. DESCRIPTION OF IBEW LOCAL 29

IBEW Local 29 is a progressive labor organization that represents individuals in the Utility, and Generation industries.

III. DESCRIPTION OF IBEW LOCAL 29'S INTEREST IN PROCEEDING

IBEW Local 29 is a party to collective bargaining agreements with the owners of baseload coal and nuclear power plants located in Pennsylvania. As a result, the wages, terms and conditions of employment of its members may be directly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, IBEW Local 29 members have a direct and substantial interest in this proceeding. As well, the unique perspective of IBEW Local 29 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in Pennsylvania's electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across Pennsylvania. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in Pennsylvania provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to IBEW Local 29 members. The Beaver Valley, Cheswick, and Brunot Island generation stations directly employ approximately 500 IBEW Local 29 members, and the maintenance and capital improvement work on these plants supports the local economy by creating thousands of well-paying union jobs for contractors. In addition, these plants contribute millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive economy in two ways. First, the preservation of certain plants will avoid the need to replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed,

reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled (and specifically trained and experienced) employees, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in Ohio, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, IBEW Local 29 strongly urges FERC to adopt the rule proposed by the DOE as promptly and comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by

the comments considered in this proceeding. FERC has thoroughly considered the impact of electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of premature closures.

In acting promptly, FERC should also direct the organized market operators to issue a rule that is not only compensatory (and based on the regulatory language of the Proposal) but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

Respectfully submitted,

Kenn Bradley
Business Manager
IBEW Local 29

Document Content(s)

IBEW Local 29 Labor Comments 10.13.17.DOCX.....1-5



Timothy W. Burga
PRESIDENT

Pierrette M. Talley
SECRETARY-TREASURER

American Federation of Labor and Congress of Industrial Organizations

October 20th, 2017

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street, NE
Washington, DC 20426

RE: Grid Resiliency Pricing Rule
FERC Docket No. RM 18 – 1 – 000

COMMENTS OF THE OHIO AFL-CIO IN SUPPORT OF THE PROPOSED GRID RESILIENCY PRICING RULE

As the Labor Federation in Ohio, representing over 500,000 workers including those in all aspects of the generation and distribution of energy, we support the proposed Grid Resiliency Pricing rule. The Ohio AFL-CIO has maintained an "all of the above energy strategy" that allows for a diversified energy portfolio. We believe that the proposed Grid Resiliency Pricing Rule falls within that strategy. If adopted, the proposed rule will ensure that existing nuclear and coal-fired electric generating stations in Ohio will be fairly compensated for their costs of operation and avoid premature retirement.

The importance of these plants remaining operational cannot be overstated. We have seen the devastation that occurs in our communities when major employers leave a region. Ohio's industrial economy has been hit disproportionately hard with the loss of over 320,000 manufacturing jobs in the last decade alone. These generating stations are, in some cases, the largest employers and catalysts for economic prosperity and growth in these areas. The continued operation of these plants is necessary for current energy needs and a major factor in attracting new businesses and economic development.

These energy facilities are crucial for the livelihood and viability of the thousands of workers who operate and maintain them, their families, and the communities in which they live. These plants contribute millions of dollars each year in state and local tax revenue that support local schools, police and fire departments, and other vital public services. If these plants close, the loss of jobs, tax revenue, and the ripple effect of such losses will be felt in every corner of Ohio.

Furthermore, the continued operation of the Davis-Bessie and Perry Nuclear Facilities, as well as the Bayshore, JM Stuart, Kyger Creek and Killen coal-fired plants are necessary to maintain a reliable supply of electricity for the region's energy intensive economy and grid stability. Preserving base load coal and nuclear power plants will keep these needed, reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

www.ohafcio.org

Ohio AFL-CIO | 500 South Front Street, Suite 700 | Columbus, OH 43215 | phone 614.224.8271 | fax 614.224.2671



For these reasons the Ohio AFL-CIO supports the proposed Grid Resiliency Pricing Rule. It is of utmost importance to workers in these facilities, the communities in which they live, and grid stability that the Commission deliberates in a timely manner and issues a final rule. Thank you for your consideration and please do not hesitate to contact my office with any questions.

Respectfully submitted,

Tim Burga, President

From: Kemper, Craig
To: [AskOE](#)
Subject: Bicameral Letters Regarding FPA 202c Emergency Authority
Date: Thursday, April 26, 2018 8:48:35 PM
Attachments: [2-21-2018 Final Signed Letter to the President on Electric Grid Resiliency.pdf](#)
[4-26-2018 Signed Addendum Letter to President re Grid Resiliency.pdf](#)

To Whom it May Concern,

Please see attached for two letters sent to the President regarding 202c Emergency Authority as it relates to electric grid resiliency. The attachments are in PDF format.

Please let me know if there are any issues opening either of them.

Regards,

Craig Kemper

Legislative Counsel

Office of Representative Keith J. Rothfus, PA-12

1205 Longworth House Office Building | Washington, D.C. 20515

Office: 202-225-2065 | Fax: 202-225-5709

Congress of the United States
Washington, DC 20515

February 21, 2018

**The Honorable Donald J. Trump
President of the United States
The White House
1600 Pennsylvania Avenue, NW
Washington DC 20500**

Dear Mr. President,

We write to express our concern regarding the preservation of our nation's fuel-secure generation capacity and threats to the resiliency of the nation's electric grid. We must ensure that the grid provides affordable, reliable, and resilient electricity on a daily basis. As a matter of both national and economic security, the electric grid must have the resiliency to respond to extreme circumstances.

Fuel-secure baseload generators, primarily coal and nuclear, are under duress. An alarming number of coal and nuclear plants have closed prematurely and more are closing at a fast rate. This is especially true in the competitive, so-called merchant markets. The rate of plant closures has a compounding effect on grid resiliency – the ability to operate through an emergency or extreme conditions – by placing undue risk of severe consequences on the system.

Our nation's nuclear and coal plants are predominantly immune to short-term fuel supply disruptions, which makes them resilient. Evidence of how integral they are to the U.S. was demonstrated in 2014 when the Polar Vortex overstressed the grid, and many generation sources were unable to respond to power needs because of fuel supply disruptions. When the grid in much of the U.S. narrowly avoided operational failure, it was fuel-secure baseload power plants and not variable sources of electricity or those with interruptible fuel supplies that provided a resilient source of electricity.

A major factor putting coal and nuclear plants at a disadvantage are federal and state subsidies to intermittent power providers, making them artificially competitive. Additionally, government mandates for purchases of certain forms of electricity and excessive regulations on nuclear and coal providers negatively impact those resources' cost competitiveness. Adding to those headwinds, grid operators (Regional Transmission Organizations – RTOs) fail to create market rules that fairly compensate fuel-secure baseload generators for the resiliency they provide the grid. Coal and nuclear generators

maintain adequate fuel on-site to ride through an extended emergency, and do so without being compensated for that.

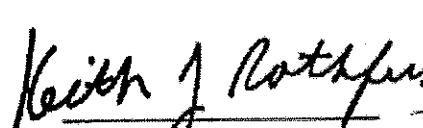
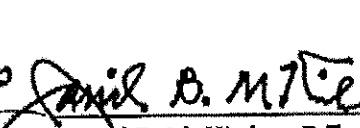
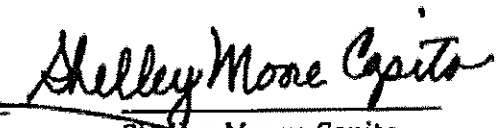
Beyond the risk injected into the electric grid carried over from the previous administration, there are national economic concerns at play too. If anti-resiliency bias within the RTOs' pricing models persists, thousands of workers and their families will be negatively affected. For generations, nuclear and coal have provided well-paying jobs in communities across America. Further plant closures will have huge negative economic effects, rippling across entire regions and drive up electric prices for ratepayers. Without your immediate help, these industries will not be able to provide the good jobs and the resilient electricity supply our nation currently has.


Mr. President, we are asking you to safeguard the grid's fuel security and direct the Secretary of Energy to exercise his Section 202(c) emergency powers under the Federal Power Act. We also request the Department of Energy evaluate the announced and expected retirement of additional fuel-secure baseload generation units and the potential national security and economic ramifications. Gambling with the resiliency of the electric grid is unnecessary and puts the safety of all Americans at risk.

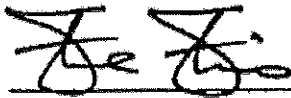
We applaud the extraordinary efforts you have already made to help turn our nation's struggling economy around, especially for middleclass workers. We hope that you will recognize the immediate severity of this issue and will take appropriate action to safeguard the electric grid's resiliency.

Thank you for your leadership, and your efforts to ensure that our nation has a safe and resilient electric grid.

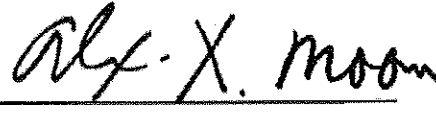
Sincerely,

		
Keith J. Rothfus Member of Congress	David B. McKinley, P.E. Member of Congress	Shelley Moore Capito U.S. Senator


Mitch McConnell
U.S. Senate Majority Leader



Steve Stivers
Member of Congress



Alexander X. Mooney
Member of Congress



Andy Barr
Member of Congress



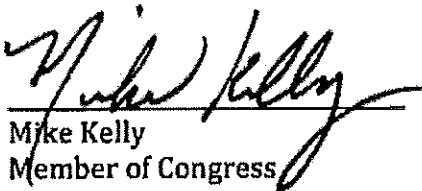
Evan Jenkins
Member of Congress



Scott Perry
Member of Congress



David P. Joyce
Member of Congress



Mike Kelly
Member of Congress



Mike Bost
Member of Congress



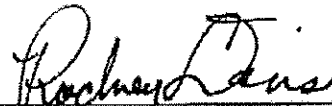
James Comer
Member of Congress



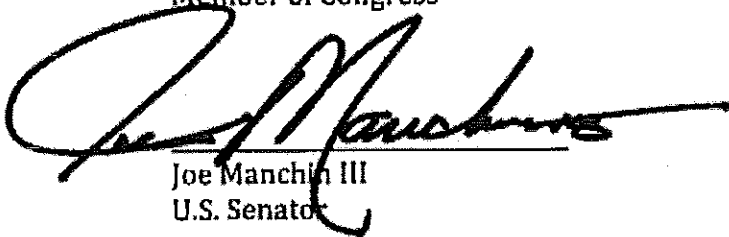
Bill Johnson
Member of Congress



Warren Davidson
Member of Congress



Rodney Davis
Member of Congress



Joe Manchin III
U.S. Senator



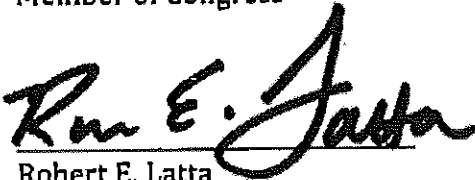
H. Morgan Griffith
Member of Congress



Bob Gibbs
Member of Congress



Glenn "GT" Thompson
Member of Congress



Robert E. Latta
Member of Congress



Larry Bucshon, M.D.
Member of Congress



Jim Jordan
Member of Congress

Congress of the United States
Washington, DC 20515

April 26, 2018

The Honorable Donald J. Trump
President of the United States
The White House
1600 Pennsylvania Avenue, NW
Washington DC 20500

Dear Mr. President,

We write to reiterate an immediate concern about our nation's electric grid. This letter is an addendum to the correspondence sent to you February 21st about national security concerns relating to the electric grid's resiliency.

On January 21, 2018, New England's electric transmission system operator, ISO New England (ISO-NE), released an Operational Fuel-Security Analysis. The analysis cites significant concerns not merely with grid resiliency, but also with reliability. On page 4 it states that "fuel-security risk – the possibility that plants won't have or be able to get the fuel they need to run, particularly in winter – is the foremost challenge to a reliable grid in New England."¹ It goes on to assert that "the retirements of coal-fired, oil-fired, and nuclear generators – resources with fuel stored on site – will have a significant impact on reliability and magnify the importance of other variables, particularly liquefied natural gas (LNG) supplies."²

The analysis reports on page 53 that "fuel-security risks are present in the vast majority of cases, even in scenarios with higher LNG, renewables, and imports." These are striking admissions in an overall alarming report warning of increased risk of rolling blackouts.³

Mere days after ISO-NE released its analysis, various media outlets reported that the nation's first ever shipment of *Russian-sourced* LNG docked in Boston to relieve New England of an energy shortage. It is unconscionable that any part of our nation needs to purchase energy from a hostile nation in order to keep homes warm and the lights on. The U.S. has long pursued a policy of energy independence precisely because it is a national security issue. This threat is real and growing every day because of short-sighted policy driving domestic fuel-secure baseload generators offline and out of the marketplace.

¹ ISO New England, *Operational Fuel-Security Analysis* (January 17, 2018), available at http://www.iso-ne.com/static-assets/documents/2018/01/20180117_operational_fuel-security_analysis.pdf

² *Id.*

³ *Id.* at 53.

Furthermore, the Department of Energy's National Energy Technology Laboratory (NETL) examined the wave of premature baseload plant closures in a March 13, 2018 report. NETL studied the Bomb Cyclone that plunged many parts of the nation into a deep freeze from December 27 through January 8. On page 3, the report states that "during the worst of the storm from January 5-6, 2018, actual market experience demonstrated that without the resilience of coal – and fuel oil/dual-firing plants – its ability to add 24-hour baseload capacity – the eastern United States would have suffered severe electricity shortages, likely leading to widespread blackouts."⁴ Regarding the PJM Interconnection on page 17, it states that "had coal been removed, a 9-18 GW [gigawatt] capacity shortfall would have developed, depending on assumed imports and generation outages, leading to a system collapse."⁵

Only days ago on March 29th, FirstEnergy Solutions, one of the largest generators of electricity to PJM, filed notices with federal officials of intentions to close three nuclear plants. These notices preceded the company filing for Chapter 11 Restructuring on March 31st. This significant news is yet another hit to the grid's resiliency and our national security.

Mr. President, please protect our nation from such premature plant closures, as well as the dangers posed by hostile nations having influence on the US electric grid.

The following members support the continued request for the Secretary of Energy to exercise his Section 202(c) emergency powers under the Federal Power Act or any other applicable statutory authority.

We continue to thank you for your efforts to keep our nation and electric grid safe and resilient.

Sincerely,



Keith J. Rothfus
Member of Congress



David B. McKinley, P.E.
Member of Congress



Shelley Moore Capito
U.S. Senator

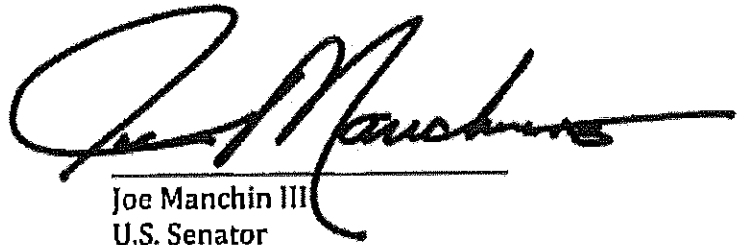
Cc: The Honorable Rick Perry, Secretary of the US Department of Energy

⁴ National Energy Technology Lab, US Department of Energy, *Reliability, Resilience, and the Oncoming Wave of Retiring Baseload Units, Volume I: The Critical Role of Thermal Units during Extreme Weather Events* (March 13, 2018), available at: https://netl.doe.gov/research/energy-analysis/temp/ReliabilityandtheOncomingWaveofRetiringBaseloadUnitsVolumeTheCriticalRoleofThermalUnits_031318.pdf

⁵ *Id.* at 17.



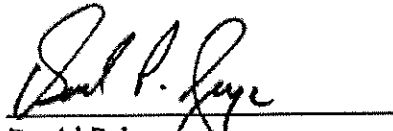
Chris Stewart
Member of Congress



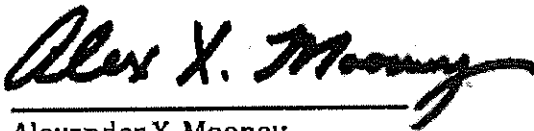
Joe Manchin III
U.S. Senator




Evan Jenkins
Member of Congress



David P. Joyce
Member of Congress



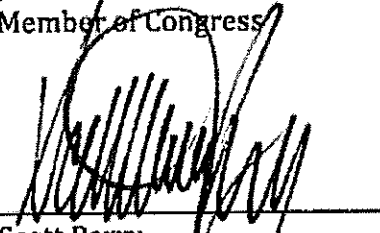
Alexander X. Mooney
Member of Congress



James Comer
Member of Congress



Mike Bost
Member of Congress



Scott Perry
Member of Congress



Morgan Griffith
Member of Congress



Hal Rogers
Member of Congress



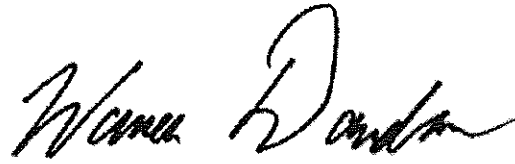
Andy Barr
Member of Congress



Steve Stivers
Member of Congress



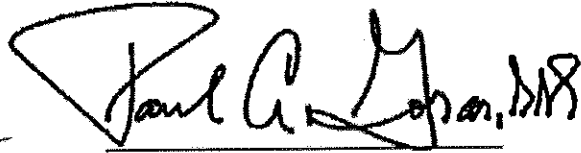
Bob Gibbs
Member of Congress



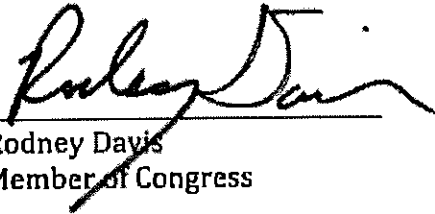
Warren Davidson
Member of Congress



Lloyd Smucker
Member of Congress



Paul A. Gosar, D.D.S.
Member of Congress



Rodney Davis
Member of Congress

From: Will Campbell
To: AskOE
Subject: First Energy and 202c
Date: Friday, April 27, 2018 2:18:58 PM

As a consumer, electrical user- and voter- in an area that First Energy's 202c petition covers, I want to express my disappointment with the DOE, and President Trump (assuming he goes along with this) for even considering their request, as it not only has no merit on it's face, but has already been rejected in a similar form by the FERC.

First Energy and their failed business decisions need to be tested by the market, and not rescued by improper, and possibly illegal, use of section 202© of the Federal Power Act.

We are not on a wartime footing, we don't have a capacity problem, and there is no other rational reason to rescue a company and their soon-to-be stranded assets.

Bailing out a private company at taxpayer expense for no good reason except politics is the modern definition of corruption. Please re-read the FERC decision on a similar request by First Energy and understand why they rejected a similar proposal.

Thank you,
Will Campbell

From: Kalagher, Kendall
To: [AskOE](#)
Subject: Congressman Joyce Submission for Section 202 C Filing
Date: Friday, April 27, 2018 9:19:15 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[10 20 17 Letter to FERC Re Baseload Power.pdf](#)

Good morning,

On behalf of Congressman Joyce, I am submitting the attached letter from several Members of Congress regarding baseload power. Mr. Joyce sent this letter in October to FERC and would like to now submit it for the comment period on the recent filing FES made on Section 202.

Please confirm receipt and let me know if anything else we can provide on our end in the meantime.

Thank you,

Kendall

Kendall Kalagher

Senior Legislative Assistant

Office of Congressman David P. Joyce (OH-14)

1124 Longworth House Office Building

Washington, D.C. 20515

(202) 225-5731



Congress of the United States
House of Representatives
Washington, DC 20515-3514

October 20, 2017

Chairman Neil Chatterjee
Commissioner Cheryl A. LaFleur
Commissioner Robert F. Powelson
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

Dear Chairman Chatterjee, Commissioner LaFleur, and Commissioner Powelson,

We write to thank the Department of Energy and Federal Energy Regulatory Commission (FERC) for initiating a rulemaking to help ensure a secure, resilient, and reliable U.S. electrical system. This will be accomplished by preserving the baseload power plants that form the backbone of our electric grid.

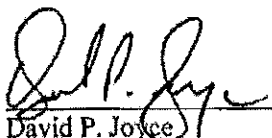
Our nation depends on an affordable, reliable, and secure supply of electricity produced by diverse energy resources. Baseload power plants are the only resources that can operate around the clock to support the energy demands of customers, businesses, and industries. These plants operate in all types of weather, and because they maintain large reserves of on-site fuel, they are not sensitive to fuel supply disruptions.


Preserving baseload plants also promotes a strong American economy. These facilities are economic engines that provide thousands of jobs not only at generating facilities and throughout the supply chain, but also in the small businesses, restaurants, entertainment venues, and other industries that comprise the communities around these plants. Local schools, police and fire departments, and other vital community services rely heavily on tax revenues paid by these facilities.

The current market structure, which undervalues baseload generation, has led to these plants closing prematurely at an alarming rate. These closures have resulted in an electrical grid with weakened resiliency and a diminished ability to respond to crisis.

A logical way to address this issue is to develop and implement market rules that appropriately compensate fuel-secure baseload generating plants. America's energy future depends on preserving a diverse, resilient, dependable, and secure energy supply. We appreciate your commitment on this matter and respectfully urge your swift action to develop and implement market rules that will prevent premature baseload plant closures, consistent with the rules and regulations of the Commission.

Respectfully,


David P. Joyce
Member of Congress

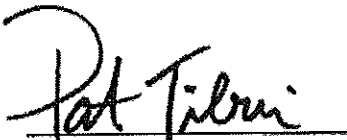

Bob Gibbs
Member of Congress



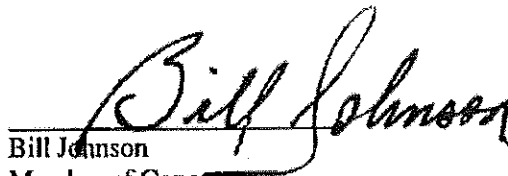
Michael R. Turner
Member of Congress



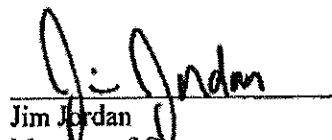
Steve Chabot
Member of Congress



Patrick Tiberi
Member of Congress



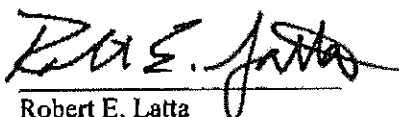
Bill Johnson
Member of Congress



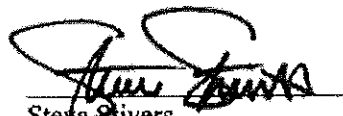
Jim Jordan
Member of Congress



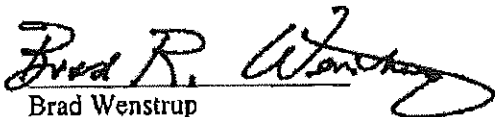
Warren Davidson
Member of Congress



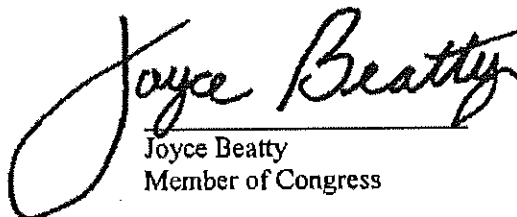
Robert E. Latta
Member of Congress



Steve Stivers
Member of Congress



Brad Wenstrup
Member of Congress



Joyce Beatty
Member of Congress

From: John E. Shelk
To: [AskOE](#)
Subject: EPSA LETTER TO SECRETARY PERRY
Date: Friday, April 27, 2018 2:12:53 PM
Attachments: [image001.jpg](#)
[DOE EPSA LETTER FINAL 042718.pdf](#)

Please see the attached letter from EPSA to Secretary Perry.

John E. Shelk

President & CEO

Electric Power Supply Association (EPSA)


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April 27, 2018

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Dear Secretary Perry:

This letter builds on the joint filing dated March 30, 2018, that the Electric Power Supply Association (EPSA) co-signed with ten other entities in response to the application filed by FirstEnergy Solutions for an emergency order under section 202(c) of the Federal Power Act, and EPSA's subsequent letter to President Trump dated April 12, 2018.

More recently, press reports indicate that the Administration is also reviewing potential statutory authorities under the Defense Production Act to subsidize certain existing coal and nuclear plants with which EPSA members compete in the PJM Interconnection regional grid that operates federally regulated wholesale power markets. Furthermore, EPSA understands that the Department also may be considering Section 215A of the Federal Power Act as added by the FAST Act which provides new authorities intended to be used to address cyber security emergencies.

Reliability and resilience in PJM and other regions with organized wholesale markets depend on financially viable power plants using the full range of fuels and technologies. The power plants that together comprise the bulk power system in these regions are operated by several different types of owners, including independent power producers that EPSA represents, not just those utility-affiliated generators seeking one-off, narrow subsidies for themselves.

Viewing the complex, inter-related power grid solely through the narrow and parochial lens of subsidy requests from individual market participants, such as FirstEnergy Solutions, or categories of fuels, such as coal and nuclear, will make wholesale markets worse off, not better. This is especially so given that all power suppliers face a range of challenges. The policy choices facing the Administration should not be limited to either the status quo or even more subsidies. Subsidies are contagious. As the market share subject to competition continues to shrink from fuel-based preferences, both federal and state, there will be woefully insufficient megawatts to compete for by those not subsidized. At that point, everyone will require non-market payments. Thus, the policy choices the Administration is examining should also include the best choice, which is eliminating discriminatory and fuel-specific "thumbs on the scale" for electricity.

The Department's policy review should not be based on statutes such as FPA Section 202(c), the Defense Production Act, and Section 215A of the Federal Power Act (FAST Act) that were never intended to be used to establish economic support arrangements for entire sub-categories of generating facilities. By limiting its review in this fashion, the Department is unnecessarily confining itself to adding yet another thumb on the scale by creating a new broad federal subsidy program. While some may view this as rebalancing what was done by the prior Administration, that simply invites others to engage in further rebalancing in the future. Such uncertainty is inherently inconsistent with making substantial investments at market risk in long-lived assets to achieve your goal of improving electricity infrastructure for the future.

The Department should not miss this historic opportunity to promote competition and open markets. Effective competition will achieve the type of secure, reliable and resilient "all-of-the-above" mix of generating facilities the Administration seeks. To this end, EPSC suggests a bold and courageous approach that reduces and then removes subsidized forms of generation from distorting competitive generation markets. This can be achieved on parallel paths:

- The Department of Energy should lead an effort to review all existing subsidies related to power generation and, to the extent it is determined that such subsidies are no longer needed or effective, work with Congress and other relevant federal agencies to eliminate those that distort markets; and,
- The Federal Energy Regulatory Commission should swiftly conclude several pending dockets through which the Commission must develop and implement effective rules to protect competitive wholesale power markets from the parasitic and distorting effects of material discriminatory subsidies, both federal and state, whether supply-side or on the demand side of the electric meter.

The focus among many federal and state energy regulators over the last several decades has been to work to transition an industry once focused almost exclusively on extensive regulation and cost-of-service reimbursement to an industry that values competition over regulation and depends on market forces to incentivize both new investment and market participant behaviors that maximize system reliability.

We have learned a lot from these efforts. First and foremost, **markets work** and, when impediments and distortions are removed from markets, **they work better**. The second thing we have learned is that, when there are concerns that the markets are not creating adequate incentives to build or retain generating units that have the attributes that the power system needs to be reliable and resilient, the best way to address those needs is through new market-based initiatives that are **fuel neutral**. For example, new products and a full suite of attributes can be introduced into the existing markets (like PJM's capacity performance product) and generating facilities can then compete to provide these products and **all** required attributes in cost-effective and innovative ways.

The approach EPSA is recommending does not prevent States from making their own resource decisions, one way or the other. If a State wishes to incentivize or provide cost support for a specific type of generation, it will continue to be completely free to do so. But, it is essential to also respect the choices made by those States that elect not to subsidize specific resource types. Thus, regardless of the State in which they are located, those generating facilities that have not been subsidized must be protected from the market distortions that occur when subsidized resources are permitted to participate in the wholesale markets without limits. Absent adoption of effective countermeasures to protect the integrity of the wholesale power markets that FERC regulates, the subsidized subset of competitors will have an unfair artificial advantage competing with unsubsidized resources to clear wholesale energy and capacity markets on which the unsubsidized resources totally rely for revenues to remain viable.

Similarly, if in the future the Department determines that specific energy assets need emergency support for identified national security reasons, any temporary cost reimbursement that is provided to the relevant asset owners needs to occur outside of these markets, so that un-subsidized resources and their customers do not bear the brunt of providing funding for what will be an emergency or national security issue.

We think the choice is clear. Removing market distortions and ensuring that the power plant attributes that the system needs are compensated within the market on a competitive basis will allow an all-of-the-above strategy to continue to be successful. Doing so will ensure that it works into the future in a manner that incentivizes and spurs new investment and innovation along the way.

We look forward to working with you in addressing the Department's very important goals for the nation's energy systems including its organized wholesale power markets.

Sincerely,



John E. Shelk
President & CEO
Electric Power Supply Association (EPSA)



April 27, 2018

Department of Energy
c/o AskOE@hq.doe.gov

RE: Federal Power Act section 202(c)

ExxonMobil Power and Gas Services Inc., an affiliate of Exxon Mobil Corporation, and ExxonMobil Gas and Power Marketing Company, a division of Exxon Mobil Corporation, appreciates the opportunity to submit these comments to the Department of Energy.

Exxon Mobil Corporation, collectively with its affiliates (ExxonMobil), constitute one of the largest U.S. suppliers of natural gas, as well as a major purchaser of electricity for its own operations. The energy we produce and the products we refine underpin the nation's economic prosperity, security, and the lifestyles American citizens enjoy. We have a long history of working with federal, state and local governments during times of emergency to ensure economic, commercial and individual recovery occurs as quickly as possible and that government priorities are swiftly addressed.

We not only oppose FirstEnergy Solutions Corporation's proposal to request invocation of governmental emergency authority in order to address its business situation ("Proposal"), but also are disappointed that an energy company would file such a request. There is no emergency facing the U.S. power grid or industry. Invocation of emergency authorities as requested would establish a troubling precedent for the future as the U.S. energy system continues to evolve.

The main arguments against the invocation of section 202(c) authority – or any other governmental emergency authority – are provided below. Additional details are provided in the filings of the American Petroleum Institute and the Natural Gas Supply Association, whose comments we support.

- No emergency exists. Numerous reports, including one by the EIA as well as comments by the grid operators, confirm that fact. Any concerns about prospective grid emergency scenarios, including cybersecurity, are best addressed by engaging with the operators as well as FERC. The market is evolving naturally by welcoming modern, efficient, flexible generation sources.
- Grid resilience and fuel diversity are complex issues which are being actively worked by subject matter experts with a stake in the outcome. Artificially retaining uncompetitive power sources is an overly simplified and ineffective response, whether those sources are coal, nuclear, gas, or renewables. The market should provide the opportunity for generation sources to compete based on their inherent capabilities, limitations, and long-term economics.

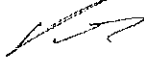
- Well-functioning markets are the best means for achieving the optimal blend of resilience, fuel diversity, and affordability. While electricity markets are not perfectly competitive, they have clearly and intentionally moved in that direction in recent decades. However, adding distortions on top of existing distortions would reverse that trend, and create economic uncertainty for current and potential future investments in the market. It would also tip the scales against technical innovation and market flexibility.
- Electricity consumers, from homeowners to small businesses to large industrial operators, would be harmed by higher electricity prices. Their voice has largely been lost in the current debate – the media tends to focus on bankruptcies and lobbying campaigns by companies and creditors – as has the adverse economic impact that would result from actions on the Proposal or similar federal interventions. These factors should be carefully considered before any action is taken.

In summary, the recently-announced retirements of several coal and nuclear plants is not creating an emergency in the electricity industry. Undertaking emergency action in the present context would cause numerous adverse consequences for essentially all participants in the electricity market, from generators to end consumers, and be contrary to market principles.

The President and Secretary have considerable authority to act in the event of a true emergency, and that authority should be constrained to and reserved for those limited circumstances. As noted, ExxonMobil stands ready to assist during those times.

We therefore urge that FirstEnergy's extraordinary request for the invocation of federal emergency powers be rejected, along with any similar options being considered, and that FERC be allowed to continue with its deliberate and thoughtful approach toward examining and addressing grid resiliency issues. FERC's approach is the established means to engage with industry to improve the grid and the power markets, and to continue to enhance U.S. competitiveness and security.

Sincerely,



Paul Greenwood

President
ExxonMobil Power and Gas Services Inc.*

* ExxonMobil Power and Gas Services Inc. purchases power and natural gas for many of ExxonMobil's U.S. facilities.

From: Kay Squires
To: AskOE
Cc: Bette J. Dodd; SBruce@mcneeslaw.com; bweishaar@mcneeslaw.com; Amanda Tyler
Subject: DOE / FirstEnergy Solutions Corp.'s Request for Emergency Action
Date: Friday, April 27, 2018 1:20:52 PM
Attachments: LK_logo_2013wline.png
BFF45B1D-FC35-4d5b-968B-A51F89D613B5.jpg
Catanzaro 4-26-18.pdf

Attached for filing please find a letter from the **Indiana Industrial Energy Consumers, Inc. (INDIEC)** regarding FirstEnergy Solutions Corp.'s Request for Emergency Action, in which INDIEC opposes any federal response to take action to interfere with retiring power plants.

Thank you.

[website](#) | [map](#)

Kay Squires

Administrative Director



LEWIS KAPPES

One American Square, Suite 2500

Indianapolis, IN 46282

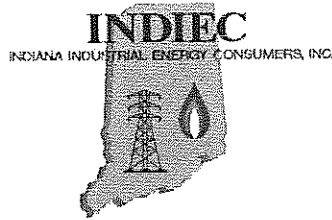
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April 26, 2018

VIA EMAIL

Mr. Michael Catanzaro,
Special Assistant to the President, Domestic Energy and Environmental Policy
The White House
1600 Pennsylvania Ave. NW
Washington, DC 20500

Re: FirstEnergy Solutions Corp.'s Request for Emergency Action

Dear Mr. Catanzaro,

I am writing you on behalf of the Indiana Industrial Energy Consumers, Inc. ("INDIEC"), regarding *FirstEnergy Solutions Corp.'s Request for Emergency Order Pursuant to Federal Power Act Section 202(c)1* ("Request") to the Secretary of the Department of Energy ("DOE") submitted on March 29, 2018.

INDIEC is an association of large energy users in the state of Indiana with an annual energy spend of \$894,000,000 and employing over 59,000 people. As such, the cost of energy is of major importance to the continued success of their industrial operations and INDIEC members have a substantial interest in keeping those energy costs as low as possible. Consequently, INDIEC is very concerned with FirstEnergy's Request because it will undermine the competitive market that exists in PJM and result in raising energy cost throughout the PJM footprint.¹ INDIEC is also concerned that granting FirstEnergy's Request will impact the MISO market and other RTO's as well.

FirstEnergy's Request is premised on the erroneous notion that the proposed future retirement of three of FirstEnergy's facilities will undermine the reliability of the grid as a whole. There is no support for this allegation and, in fact, PJM is on record as stating that there is no immediate threat to system reliability.² Rather, the proposed retirements are the result of appropriate price signals reflecting that more expensive generation is being replaced by less expensive generation. This is how the markets should work.

¹ INDIEC joined in the protest of the PJM Consumer Representatives submitted April 5, 2018 to DOE.

² Letter of PJM Interconnection LLC to Secretary Perry dated March 30, 2018.

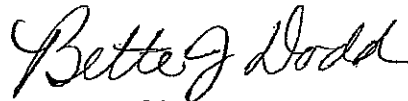
FERC received extensive comments from PJM and other stakeholders in response to the Secretary's proposed grid resilience pricing rule, which addressed most of the same arguments in FirstEnergy's Request. FERC found that the pricing relief requested was not justified.³ Instead, FERC has begun proceedings to provide further analysis of the issues raised by the proposed rule.⁴ FirstEnergy's Request is an attempted end run around FERC's January 8th Order.

Moreover, FirstEnergy's Request has not demonstrated an emergency exists. DOE regulations clearly state that economic factors relating to service are not considered emergencies unless there is an imminent inability to supply electric service. Consequently, FirstEnergy has failed to meet even the first criteria for seeking emergency relief, much less demonstrating that a reliability emergency exists.

Indiana is a manufacturing intensive state. Industrial operations in Indiana are already facing continued rising energy costs. Granting FirstEnergy's Request and forcing the PJM market to subsidize unproductive, noncompetitive generation facilities adds to rising energy costs and provides a disruption of the competitive wholesale markets. The long-term effect of granting FirstEnergy's Request would undermine the public's confidence in the markets. Further, if FirstEnergy's Request is granted, it could provide a precedent for other utilities to follow in other wholesale markets such as MISO, undermining all RTO markets.

For all of the above stated reasons, INDIEC requests that the Administration reject FirstEnergy's Section 202(c)1 Request and decline to take other action to interfere with retiring power plants.

Respectfully submitted,



Bette J. Dodd

Executive Director,

Indiana Industrial Energy Consumers, Inc.

³ See Grid Reliability and Resilience Pricing, 162 FERC ¶ 61,012 at pp 14-15 (January 8, 2018).

⁴ *Id.* at pp 17-20.

From: Richard Miller
To: [AskOE](#)
Subject: FirstEnergy's 202(c) request
Date: Friday, April 27, 2018 10:47:00 PM

Dear Sirs:

FirstEnergy's 202(c) request for a federal bailout is un-American. They have made loads of money by providing energy when we didn't know how to do it any other way. They made bad decisions for the future of their business. The American people don't owe them a pass for their bad decisions. They need to be allowed to go bankrupt as they deserve due to their bad decisions.

Best Regards,

Richard Miller

From: Kim
To: AskOE
Subject: Help save our Perry Nuclear Power Plant Jobs In Perry Ohio
Date: Saturday, April 28, 2018 11:39:45 PM

President Thrump and Rick Perry please help our plant stay open 700 jobs our on the line ^{(b) (6)}

and our community will go
down hill fast taxes will soar business will shut done . You campaigned on coal and nuclear
please help the plant just filed the other day with the NRC to start paper work for 2021 it will
close it for good. I don't understand how they can file with NRC no decisions from your
areahe yet. Our library will be cut police and fire departments cut it will bad if Perry closes
please help save our job keep the plant open gird needs it security. Present Thrump please
come up to the PerryPowrt Plant the workers need the moral. Thank you for your time.

Kim and Gary Godfrey
(b) (6)

PS come to our Perry Nuclear Power Plant and tour it and give a speech please Mr. president.

Sent from my Verizon Wireless 4G LTE DROID



PJM Interconnection, L.L.C.
2750 Monroe Boulevard
Audubon, PA 19403

Document 128

Steven R. Pincus
Associate General Counsel
T: (610) 666-4438 | F: (610) 666-8211
steven.pincus@pjm.com

April 30, 2018

The Honorable James Richard Perry
Secretary of the Energy
United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: First Energy Solutions, Corp. Request for Emergency Order Pursuant to Federal Power Act Section 202(c) Submitted March 29, 2018

Dear Secretary Perry:

PJM Interconnection, L.L.C. ("PJM") respectfully submits to the Secretary of Energy (the "Secretary") additional new information to enhance the record and contribute the Secretary's understanding of the issues. This information supplements the Motion to Intervene and Limited Response filed by PJM on April 13, 2018 (the "Response").¹ PJM recognizes that fuel security raises questions about electric system resilience which go beyond reliability. Fuel security focuses on the risks of fuel supply and delivery to generators.

On April 30, 2018, PJM published "Valuing Fuel Security," setting forth the next steps of PJM's resilience initiative which is attached hereto and incorporated herein.² PJM is initiating a

¹ The Response included an attached report ("PJM's Report") giving PJM's perspective and response to a report issued by the National Energy Technology Laboratories ("NETL") on March 13, 2018 (the "NETL Report"). The PJM Report concluded that performance during the 2017/2018 cold snap is "evidence that the grid in the PJM service area remains strong, diverse and reliable." PJM Report page 10.

² *Valuing Fuel Security* found at: <http://www.pjm.com/-/media/library/reports-notice/special-reports/2018/20180430-valuing-fuel-security.ashx?la=en> ("Fuel Security Initiative").

process, starting immediately, to analyze fuel security vulnerabilities in an evolving generation fleet. The process will involve three phases:

- Identify system vulnerabilities and determine attributes such as on-site fuel requirements, dual fuel capability or others that ensure that peak demands can be met during extreme scenarios.
- Model those vulnerabilities as constraints in PJM's capacity market, similar to existing transmission constraints, allowing for proper valuation of needed attributes in the market.
- PJM would work with the U.S. Department of Homeland Security, the U.S. Department of Energy, the Federal Energy Regulatory Commission, states, stakeholders and others to ensure that the results are consistent with identified security needs in the PJM footprint, including service to key military installations and other identified security concerns.

PJM actively participated in the proceedings before the Federal Energy Regulatory Commission (the "Commission") on grid resilience. In response to the Secretary's proposed rule for final action,³ PJM submitted initial comments on October 23, 2017,⁴ and reply comments on November 7, 2017,⁵ in Commission Docket No. RM18-1-000 regarding the Secretary's proposal, both of which are incorporated herein by reference.

Then in response to the Commission's January 8, 2018, Order Terminating Rulemaking Proceeding, Initiating New Proceeding, and Establishing Additional Procedures,⁶ PJM submitted comments in response to the Grid Resilience Order which are incorporated by reference herein.⁷

³ The full text of the Secretary's proposal can be found at: <https://energy.gov/downloads/notice-proposed-rulemaking-grid-resiliency-pricing-rule>.

⁴ *Initial Comments of PJM Interconnection, L.L.C. on the United States Department of Energy Proposed Rule* found at: https://elibrary.ferc.gov/idmws/file_list.asp?document_id=14612546 ("Initial Comments").

⁵ *Reply Comments of PJM Interconnection, L.L.C. on the United States Department of Energy Proposed Rule* found at: https://elibrary.ferc.gov/idmws/file_list.asp?document_id=14617934 ("Reply Comments").

⁶ *Grid Resilience in Regional Transmission Organizations and Independent System Operators*, 162 FERC ¶ 61,012 (2018) ("Grid Resilience Order"). In the Grid Resilience Order the Commission (1) terminated the proceeding regarding the proposed rule on Grid Reliability and Resilience Pricing submitted to the Commission by the Secretary that was focused on providing cost-of-service compensation to generators with on-site fuel capability, and (2) initiated a new proceeding under Docket No. AD-7-000 on Grid Resilience in Regional Transmission Organizations and Independent System Operators. The Grid Resilience Order directed each Regional Transmission

The Fuel Security Initiative builds off of PJM's published analysis of the reliability attributes associated with various potential future resource mixes.⁸ In the Fuel Report, PJM's analysis concluded that its bulk electric system could be operated reliably under an array of future supply portfolios. PJM is continuing now expeditiously to ensure fuel security as outlined in the Fuel Security Initiative.

In addition, PJM organized and sponsored two well-attended Grid 20/20 events, one on fuel diversity and resilience⁹ and the other on grid security and resilience.¹⁰ The April 2017 Grid 20/20 event facilitated a stakeholder discussion on fuel mix diversity and security issues and their intersection with resilience.

Finally, PJM has completed the 30-day analysis of the deactivation notice dated March 28, 2018, which PJM received from FirstEnergy Solutions Corp. on behalf of FirstEnergy Nuclear Generation, LLC (together referred to as "FirstEnergy Solutions") notifying PJM in the intent to deactivate certain nuclear units pursuant to PJM Open Access Transmission Tariff ("PJM Tariff"). In accordance with PJM Tariff, section 113.2, PJM notified FirstEnergy

Organization ("RTO") and Independent System Operator ("ISO"), including PJM, to submit initial comments and responses to the Commission on resilience in order to enable the Commission to holistically examine the resilience of the bulk power system.

⁷ *Comments and Responses of PJM Interconnection, L.L.C.* incorporated by reference and found at: https://elibrary.ferc.gov/idmws/file_list.asp?document_id=14648921 ("PJM March 9 Comments").

⁸ *PJM's Evolving Resource Mix and System Reliability* (March 30, 2017) incorporated by reference and found at: <http://www.pjm.com/-/media/library/reports-notices/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.Ashx?la=en> ("Fuel Report"); PJM, *Appendix to PJM's Evolving Resource Mix and System Reliability* (March 30, 2017), <http://www.pjm.com/-/media/library/reports-notices/special-reports/20170330-appendix-to-pjms-evolving-resource-mix-and-system-reliability.ashx?la=en>.

⁹ See Grid 20/20: Focus on Resilience (Fuel Mix Diversity & Security), April 19, 2017 ("April 2017 Grid 20/20"), <http://www.pjm.com/committees-and-groups/stakeholder-meetings/symposiums-forums/grid-2020-focus-on-resilience-part-1-fuel-mix-diversity-and-security.aspx>.

¹⁰ See Grid 20/20: Focus on Security & Resilience, September 19, 2017 ("September 2017 Grid 20/20") incorporated by reference and found at: <http://www.pjm.com/committees-and-groups/stakeholder-meetings/symposiums-forums/grid-2020-focus-on-security-and-resilience.aspx>.

Solutions that the deactivation of these generating units is not expected to adversely affect the reliability of the PJM Transmission System due to a combination of remedial measures, including (i) accelerating the completion of existing baseline upgrades included in the Regional Transmission Expansion Plan ("RTEP upgrades"), (ii) timely completion of new RTEP upgrades, and (iii) implementing system redispatch measures. With these measures, the PJM Transmission system will remain reliable, and therefore the generating units listed above may plan to deactivate as scheduled, based upon the identified remedial measures. PJM posted additional information on the deactivation analysis for the subject nuclear generator units for the May 3, 2018 Transmission Expansion Advisory Committee which are incorporated herein by reference.¹¹

PJM respectfully submits that the forgoing information and documents incorporated by reference will help clarify the record in this proceeding and contribute the Secretary's understanding of the issues.

Respectfully submitted,

/s/ Steven R. Pincus

Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.

Craig Glazer
VP, Federal Government Policy
PJM Interconnection, L.L.C.

.Cc: Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Katherine Konieczny, U.S. Department of Energy

¹¹ *Generation Deactivation Notification Update*, May 3, 2018, <http://pjm.com/-/media/committees-groups/committees/teac/20180503/20180503-teac-generation-deactivation-notification.ashx>

CERTIFICATE OF SERVICE

I hereby certify that I this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Audubon, PA this 30th day of April, 2018

/s/ Steven R. Pincus
Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403
(610) 666-4370
steven.pincus@pjm.com

Introduction

Resilience describes a broad array of low-probability but high-impact risks at all stages of the production, transmission and distribution of electricity. PJM Interconnection is uniquely positioned to see the bigger picture of the many factors that affect the resilience of the grid. PJM now seeks to isolate one type of resilience risk: fuel security. Fuel security focuses on the vulnerability of fuel supply and delivery to generators and the risks inherent in increased dependence on a single fuel-delivery system.

In March 2017, PJM published an analysis of the reliability attributes associated with various potential future resource mixes.¹ PJM's analysis concluded that its bulk electric system could be operated reliably under an array of future supply portfolios. However, the scope of the analysis did not include the resilience of the system with various potential portfolios nor the risks associated with significant disruptive events.

As the paper noted: "Heavy reliance on one resource type, such as a resource portfolio composed of 86 percent natural gas-fired resources, however, raises questions about electric system resilience, which are beyond the reliability questions this paper sought to address."

As is the case with reliability standards, PJM believes the most effective way to address fuel security is to define and establish fuel security criteria and then use market forces to allow all resources to compete to meet those criteria. The PJM markets can provide excellent, fuel-neutral tools to value identified and verified fuel security attributes. Additionally, the PJM markets offer a competitive environment to deliver fuel-secure electricity in the most efficient and cost-effective manner to customers. The market can also send a price signal that works to incent investment in fuel-secure infrastructure.

This market signal can be used as one data point to assist in valuing various alternatives such as the benefits of new pipelines, the benefits of resources with on-site fuel and the value of new technologies that promote an array of fuel-secure resources. Market participants would respond to the signal with the most cost-efficient approach to ensure fuel security. **The market-based approach outlined below can work to achieve a cost-effective, fuel-secure fleet of resources.**

As defined by PJM, fuel security is the ability of the system's supply portfolio, given its fuel supply dependencies, to continue serving electricity demand through credible disturbance events, such as coordinated physical or cyber-attacks or extreme weather that could lead to disruptions in fuel delivery systems, which would impact the availability of generation over extended periods of time. To define potential fuel-security criteria, PJM needs to understand the fuel-supply risks in an environment trending towards greater reliance on natural gas supply and delivery.

The goal is to identify triggering thresholds (such as a simulated loss of load) that indicate locations on the system where additional fuel security assurance is needed. PJM could then model those locations as constraints in the capacity market, just as PJM models transmission constraints today when determining the parameters that form the locational requirements in the capacity auction. As with transmission constraints, modeling fuel security would only

¹ <http://pjm.com/-/media/library/reports-notice/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx?la=en>

result in price separation if the results demonstrate a constraint. Ideally, if analysis indicates the need for constraints, PJM would implement them by the May 2019 Base Residual Auction.

As a first step, PJM will perform targeted analyses to identify fuel security risks that could affect specific locations on the system (or depending on the nature of the fuel supply risk on the aggregate PJM system) and establish criteria to apply to existing market mechanisms in order to produce efficient and cost-effective results for customers. This document outlines the objectives for this study, defines the approach fundamentals, including assumptions, and establishes the timeline for completion.

Proposed Approach

PJM recognizes that assessing fuel security is complex and best tackled in phases. The first phase is to assess, via analysis, the scope of fuel security vulnerabilities and the development of criteria. The following phases would use the results of the first phase as input to determine the valuation of fuel security attributes. PJM anticipates overlap between phases as it continues to refine the analysis, criteria and methods for valuing fuel security.

Phase I: Analysis – Identify potential system vulnerabilities on a locational basis and develop fuel security criteria to address those vulnerabilities.

Phase I is intended to identify potential system vulnerabilities and to determine attributes such as requirements for amounts of on-site fuel and dual-fuel capability, among others, to ensure that peak demands can be met during realistic but extreme contingency scenarios in various supply portfolios.

As PJM concluded in its March 2017 report, PJM's current fuel portfolio is reliable, diverse and among the highest performing of those studied. It is well supplied with the required generator reliability attributes. The PJM system can remain reliable with the addition of more natural gas and renewable resources. However, an increased reliance on any one resource type introduces potential fuel security risks not recognized under existing reliability standards.

Such risks could include the deliverability logistics of fuel supplies during stressed conditions over time as opposed to more momentary interruptions that otherwise are considered through the procurement of reserves. The intent of Phase I will be to stress-test the system under various extended fuel supply disruption scenarios in order to better understand reliability outcomes resulting from the current capability of local onsite fuel and back-up fuel.

This is different from the objective of the Capacity Performance enhancements already implemented in the PJM capacity market. Capacity Performance ensures that individual resources are prepared to perform when the system needs them the most. The vulnerabilities that the Phase I analysis will identify and model as constraints may be beyond the ability of any individual unit owner to control through more secure fuel contracts or investment in particular units.

Phase II: Modeling – Work through the PJM stakeholder process to incorporate vulnerabilities, on a locational basis, as constraints in PJM's capacity market (similar to PJM's modeling of transmission constraints today).

This would allow for the proper valuation of needed locational attributes as well as competition among resources that today or in the future can provide those attributes to ensure a resilient grid. The results of the Phase I analysis will be used in Phase II to help model constraints as part of the planning parameters in PJM's capacity market to help identify and value needed fuel security attributes at particular locations on the system.

Recognizing that the PJM region is large and diverse, generation located, for example, on top of a Marcellus shale field does not face the same fuel security issues as a generator more distant from supply and connected to a lateral pipeline served by a single natural gas distribution company. Similarly, delivery mechanisms for coal and oil differ across the region. For these reasons, PJM recommends starting with a locational analysis focused on specific fuel delivery vulnerabilities, which will differ depending on geography. These constraints would then be modeled in the capacity market along with existing and projected transmission constraints to ensure that each zone and sub-zone in PJM is able to maintain reliable service during a disruptive event that could last several days. As with transmission constraints, modeling fuel security would only result in price separation if the results demonstrate a constraint.

Phase III: Ongoing Coordination – Address any specific security concerns identified by federal and state agencies such as physical and cybersecurity hardening of critical assets that are cleared in the market.

In Phase III, PJM would work with the U.S. Department of Homeland Security, the U.S. Department of Energy, the Federal Energy Regulatory Commission, states, stakeholders and others to ensure that the results are consistent with identified security needs in the PJM footprint, including service to key military installations and other identified security concerns. Further, those facilities that clear as fuel-secure resources in the capacity market would need to assure regulators that they are “hardened” to address identified physical and cybersecurity threats and that the fuel system upon which those resources depend are similarly able to withstand identified physical and cybersecurity threats.

Assumptions

The following are a few high-level indicative assumptions that could be utilized for the analysis in Phase I:

- Generator forced, planned and maintenance outage rates (other than outages related to fuel supply) will be consistent with recent winters
- Oil-fired and dual-fuel generator withdrawals of oil and ease of replenishment will be modeled on a locational basis, taking into account the locational supply chain and contractual arrangements associated with such replenishments. PJM will study several different capacity supply portfolios under multiple different gas-availability scenarios.

- The study will be simulated under 2017-18 Cold Snap extended cold weather conditions and under 2014 Polar Vortex loads and wind chill levels.²
- The study will be conducted for the RTO region and sub-regions.

Analysis Scenarios

PJM will create several capacity portfolio scenarios for the purposes of the study. They include:

- **Base Portfolio:** This scenario includes the 2020-21 PJM resource portfolio with scheduled retirements in addition to other retirements in order to have the Installed Reserve Margin (IRM) equal the approved value of the 2017 PJM Reserve Requirement Study of 16.6 percent.³
- **Stressed Portfolio:** This scenario includes the base portfolio scenario along with additional coal and nuclear retirements.
- **High-Stressed Portfolio:** This scenario includes the base scenario along with an assumption that an increased percent of coal and nuclear are retired and replaced with natural gas within the same zone as the retired resources.

Disruptions

PJM will simulate disruptions to fuel delivery systems that could be the result of credible extreme events such as coordinated physical or cyber-attacks, extreme weather, etc. The following is a description of the disruption scenarios:

- No disruptions; generators have access to supply throughout the winter, subject to current pipeline capacity.
- Reduction of a realistic percentage of delivery capability on particular constrained portions of pipelines in the PJM region. This would address the potential for a significant disruptive event to degrade the pipelines' ability to deliver to a set of generating units.
- In addition to reduced supply availability over longer periods, study a few realistic but extreme contingencies such as a *force majeure* event on key delivery facilities.
- In addition to reduced gas availability, analyze other fuel supply disruptions.

Each of these disruptions will be applied to the three capacity portfolio scenarios described above.

² <http://www.pjm.com/-/media/library/reports-notice/weather-related/20180226-january-2018-cold-weather-event-report.ashx>

³ <http://www.pjm.com/-/media/committees-groups/committees/pcl/20171012/20171012-item-03a-2017-pjm-reserve-requirement-study.ashx>

Anticipated Outcome

PJM anticipates completing the study within the next several months. The results will be discussed with PJM stakeholders and state and federal agencies.

PJM intends to use the study results to define (if analysis indicates they are necessary) specific fuel-security criteria that could be implemented as constraints in the capacity market for application in the next possible Base Residual Auction. These constraints will be defined in a fuel-neutral manner, such that all resources are able to compete to meet them. Including such criteria in the capacity market modeling would ensure that the capacity market commits resources based on the least-cost set that ensures resource adequacy including fuel security considerations.

Approach Rationale

PJM believes the most effective way to address fuel security is to define and establish fuel security criteria and then use market forces to allow all resources to compete to meet those criteria. The competitive markets remain the best mechanism to use to meet the needs of maintaining a reliable and fuel-secure system at the lowest reasonable cost to consumers. Establishing the criteria and constraints proactively will allow them to be modeled in the capacity market before the PJM system is at a point where the constraints could be violated. By doing so, the market construct will be prepared and configured to recognize these constraints if and when they do arise, so that the market can commit resources on the basis of those constraints. Moreover, using the existing market constructs is expected to limit significantly the number of instances where out-of-market actions are necessary.

PJM looks forward to working with stakeholders, federal and state agencies on further developing the incorporation of fuel security criteria into its markets going forward.

Proposed Timeline

Acknowledging that valuing fuel security is a complex effort, the proposed approach attempts to organize the effort in incremental phases. The phases are not necessarily contemplated to be sequential and PJM acknowledges that there will be overlap between the phases as we collect feedback and work through the stakeholder process. PJM proposes the following timeline:

- Phase I, initial analysis, completed in 3-4 months
- Phase II completed in 4-5 months
- Phase III ongoing

These phases and timeframes will be fluid and dynamic. Ideally, if analysis indicates that fuel security constraints are necessary, they would be implemented by the May 2019 Base Residual Auction.

Stakeholder Feedback

PJM welcomes stakeholder feedback regarding the scope of this analysis. To that end, PJM will schedule a special MRC conference call in the near future to garner stakeholder feedback on this plan. Of course, protections, including those addressed through PJM Critical Electric Infrastructure Information rules, would be needed to shield the exact input and results of that modeling to prevent vulnerabilities from being publicly released. PJM is prepared to work with the Federal Energy Regulatory Commission and stakeholders to develop appropriate mechanisms to achieve appropriate transparency.

From: jerry bohinc
To: [AskOE](#)
Subject: PMJ comments especially for Ohio review
Date: Tuesday, May 01, 2018 12:02:37 PM

Conversion of nat gas generation because of cost and environmental considerations should include analysis of following.

[1] Generation using renewables of hydrogen which is then inserted in nat gas storage facility to make higher content BTU gas. Outcome is more efficient generation from nat gas facilities. Also provides use of off peak available power from renewables. These kinds of systems are being stood up in Canada and Gr and is cutting edge advantage increasing value of renewables and good solution for highest energy backup supplies

[2] Related issues is to encourage nat gas generator operators to add additional new tech CO2 capture systems on output. This could start move to 90% plus performance reductions regarding CO2 getting very near nuclear without the costs and lingering issues. This approach is very interesting for Ohio as the new gas generators are very near Utica and Marcellus producing wellheads and CO2 could easily be concentrated and injected back into field

[3] These are new tech suggestions but DOE/ PMJ analysis projecting out 2-5 years make all reasonable and decisions should provide path to encourage adoption rather than simply rely on low probability risk as excuse for maintaining high cost backups

Jerry Bohinc

(b) (6) cell

Gates Mills, Ohio 44040

International Brotherhood of
BOILERMAKERS • IRON SHIP BUILDERS

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INTERNATIONAL PRESIDENT
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WILLIAM T. CREEDEN
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FAX: 913-281-8102

February 21, 2018

President Donald J. Trump
The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20050

Dear President Trump,

On behalf of the International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers (Boilermakers), I write to urge action by your administration, through the Department of Energy (DOE), to use emergency powers to avoid the imminent closure of critical coal and nuclear power plants. Hundreds of coal-fueled generating plants have closed over the past several years due to lower natural gas prices and stringent EPA regulations. Some nuclear units are at risk because they cannot recover their costs under current electricity market rules, leaving some states struggling to ensure their economic viability.

Recently, the Federal Energy Regulatory Commission (FERC) rejected a proposed rule by DOE to provide full cost recovery for coal and nuclear units operating in competitive power markets. This rule would have helped to ensure fuel diversity and resilience of the electric power grid by correcting competitive electricity markets in the way that power producers are compensated. DOE's proposed rule recognized that baseload coal and nuclear plants provide unique benefits to the electric grid due to the security of their "on the ground" fuel supplies and their inherent stability and reliability.

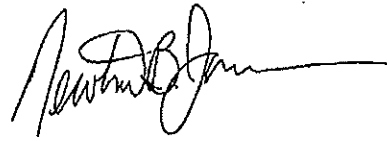
Unfortunately, the lack of action by FERC has now left too many of these coal and nuclear power plants vulnerable to imminent retirement. These plant closures will certainly result in further strain on the electric grid and reliability - not to mention the detrimental effects on the communities that these plants support through a strong tax base and steady employment, including thousands of highly-skilled Boilermakers who construct and maintain these coal and nuclear units.

Too many baseload power plants have already closed in recent years. The premature retirement of many more due to outdated market rules will further undermine electric reliability, affecting consumers, manufacturing industries, and high-tech businesses. Once these baseload power plants close, they do not reopen.

FERC's refusal to address this problem as proposed by DOE has left few alternatives and, in our view, requires immediate, corrective action by DOE.

I urge you to direct DOE Secretary Perry to use his emergency authority to intervene in this serious situation to prevent the further closure of coal and nuclear baseload generators.

Sincerely,

A handwritten signature in black ink, appearing to read "Newton B. Jones", with a long horizontal flourish extending to the right.

Newton B. Jones
International President

cc: Hon. Rick Perry, Secretary, Department of Energy
U.S. International Vice Presidents



Tishekia E. Williams
Assistant General Counsel, Regulatory

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Document 131

May 1, 2018

VIA OVERNIGHT MAIL AND EMAIL

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Bruce Walker
Assistant Secretary,
U.S. Department of Energy
Office of Electric Delivery and Energy Reliability
1000 Independence Avenue, S.W.
Washington, DC 20585

Catherine Jereza
Deputy Assistant Secretary
U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
1000 Independence Avenue, S.W.
Washington, DC 20585

**Re: FirstEnergy Solutions Corp. March 29, 2018 Request for Emergency Order
Duquesne Light Company's Motion to Intervene**

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

It has come to Duquesne Light's attention that language in its "Motion to Intervene," filed April 11, 2018, may be misconstrued. To clarify, Duquesne Light did not intend to take a substantive position regarding FirstEnergy Solutions' 202(c) application at this time. Simply, Duquesne Light's position is that the company and its customers could experience reliability impacts and changes in energy, capacity and transmission costs by FirstEnergy Solutions' application, and requests full party rights to protect its interests.

Respectfully Submitted,

Tishekia E. Williams
Attorney ID#208997



April 13, 2018

East Penn Manufacturing Co.
P.O. Box 147, Deka Road, Lyon Station, PA 19536-0147
Phone: 610.682.6361, Fax: 610.682.4781

www.dekabatteries.com

Document 132

President Donald J. Trump
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

RE: Request for Emergency Order By FirstEnergy Solutions Corp. Under Federal Power
Act Section 202(c)

Dear Mr. President:

East Penn Manufacturing vigorously opposes FirstEnergy Solutions Corp.'s Request to the Department of Energy for issuance of an Emergency Order under Section 202(c) of the Federal Power Act.

Granting the Request would undermine the competitive forces at play in wholesale electricity markets and directly undercut the tremendous economic advantage of the Marcellus and Utica natural gas shale plays in the United States. American companies and consumers would be unnecessarily subjected to higher energy bills if the Request were to be granted.

East Penn Manufacturing has thirteen facilities in the PJM region. East Penn employs 7,427 and provides economic benefits to Illinois, Indiana, Kentucky, Maryland, Ohio, Pennsylvania, Virginia, and West Virginia and to America. Energy prices are a significant portion of East Penn Manufacturing operating costs. As you know, higher energy and regulatory costs threaten the competitiveness of American industries, manufacturers, producers, and large industrial users of energy like East Penn Manufacturing.

There is no looming emergency in the PJM region. Very healthy electricity capacity reserves are available throughout the region that is targeted by the Request. Mechanisms and standards are in place to ensure reliable delivery of electricity. Energy prices are currently reflecting lower prices for natural gas and other electric generation fuels. An emergency order from the Department of Energy would be unnecessary and unlawful.

If granted, FES's Request would unnecessarily raise energy prices for consumers and directly undercut the tremendous economic advantage of U.S. natural gas shale plays. Energy prices are currently reflecting lower fuel prices.

On behalf of East Penn Manufacturing, I strongly recommend that the Request be denied.

Respectfully,

Christy Weeber
Senior VP Finance
East Penn Manufacturing

c: The Honorable James Richard Perry, Secretary, Department of Energy

From: Ellman, Martin F
To: [AskOE](#)
Subject: Pro Diversified Energy Portfolio and National Energy Policy inclusive of Nuclear and Coal
Date: Tuesday, May 01, 2018 12:21:31 PM
Attachments: [image001.png](#)

(b) (6) Our country needs a Fully Diversified Energy Portfolio and National Energy Policy inclusive of Nuclear, Coal, Gas, Hydro, Wind, Solar, Energy Storage, and Other Renewables to be as strong and independent as we can be with respect to Reliability, Security, Economic Stability, Stewardship of our Resources for our children and their children and grandchildren, etc.. NG is a very precious and useful natural resource used as a primary feedstock in our chemical and manufacturing facilities, for power generation, and as a primary fuel to heat our homes, we need to continue to expand our NG exploration and use for sure, but treat it as so, and in addition not rely on it as our primary power generation source. I'm a proponent of all of the above fuel sources and technologies and our ability to advance their use responsibly, not picking ones over others but picking them all, and above all making them all work for us. So I ask you all involved in these very important policy decisions to not think small, think big picture.

Martin F. Ellman, P.E. CEM, DGCP

Sr. Project Manager
Power/Energy Division



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This e-mail is intended for the addressee shown. It contains information that is confidential and protected from disclosure. Any review, dissemination, or use of this transmission or its contents by persons or unauthorized employees of the intended organizations is strictly prohibited.

The contents of this email do not necessarily represent the views or policies of Middough.

From: John Langkam
To: [AskOE](#)
Subject: Nuclear and coal fire plants
Date: Tuesday, May 01, 2018 8:41:19 AM
Attachments: [image001.jpg](#)
[John Langkam.vcf](#)

A capital market lets economics decide what will survive and what will not. Let the economics do their part without subsidies.

Thank you,

John Langkam



From: Mike Murphy
To: [AskOE](#)
Subject: FirstEnergy Bailout Request
Date: Tuesday, May 01, 2018 5:27:43 PM

To Whom It May Concern:

FirstEnergy's federal bailout request poses a serious threat to competitive, clean energy.

FirstEnergy's attempt to block the sun and stop the wind present an existential threat to our future.

DENY FirstEnergy's Request!

Michael F. Murphy
(b) (6)

From: Jim Trakas
To: AskOE
Subject: RE: Please Invoke Section 202 (C) for First Energy's Three Nuclear Power Plants
Date: Tuesday, May 01, 2018 12:34:36 PM

Dear Sir or Madam:

I write as the Public Utilities Chairman of the City of Independence, Ohio, a community that relies upon stable power supply from its energy suppliers, including First Energy, whom had once been headquartered in our community. I ask that the Secretary of Energy invoke Section 202 (C) to save our nuclear power plants that provide security and stability to Ohio and Pennsylvania consumers.

For several reasons, the extraordinary power associated with Section 202 (C) should be invoked:

1. I fear that shuttered nuclear power plants are a safety risk and an appetizing target for terrorism, which would meet the national security definition associated with a 202 (C) action. Many credible threats have come in as to terrorists wishing to attack America, either from within or overseas threats. Having three shuttered nuclear plants in this region make for ripe targets of opportunity, and we should not afford terrorists those opportunities.

We know that Al Queda, ISIS, and other Moslem terrorists have targeted nuclear power plants. President George W. Bush stated the threat in 2002, and that U.S. intelligence found diagrams of U.S.A. nuclear power plants in Afghanistan. Terrorists in Belgium were plotting an attack on a nuclear power plant.

Due to good intelligence and vigilance, these attacks were thwarted, but should we actually shut down plants, it makes them even more vulnerable to attack and opens our region up to a ripe target, something that should be avoided from a national security perspective.

2. The United States of America continues to be at war with terrorists, foreign and domestic since 14 SEP 01, under Public Law 107-40, which is still in affect. (b) (6)

unit drills monthly to assist civilian authority in case of attack. Forces of the United States of America are deployed all around the globe, but particularly in Afghanistan, where threats to America's nuclear power plants have been evidenced and continue to be evidenced. Our enemies are constantly plotting the demise of the nation during the Global War on Terror, and the authorization of force granted President Bush and his successors, are still in force. We are in a state of war against terrorists, and terrorists desire to destroy America's nuclear power plants. It is highly relevant to our national security strategy for maximum defense of our nuclear industry.

3. Should America be forced to defend itself in another war with more substantial deployments, nuclear power is certainly a strategic asset to our national defense industry. Current forms of energy would be scarce, and having stable and secure nuclear power must be a part of our national security strategy.

We are fortunate to have coal, natural gas, wind, and sun, but in times of war, keeping the factories of America going for the arsenal of democracy needs all available options. It would take years or months to re-establish a nuclear power facility, time that in times of armed attack, the U.S.A. simply does not have. Nuclear is a key to our national defense industry and essential to the 202 (C) process that I am advocating for.

There are very valid civilian reasons to continue the use of nuclear power, including the research that benefits our national defense, but your task is to declare First Energy's nuclear plants as national defense resources, which they are.

My claims are backed by factual evidence according to national security experts, and known terrorist attacks and thwarted attacks.

I ask you to use the authority at your discretion to declare First Energy's nuclear power plants as national security strategic assets and invoke section 202 (C) as soon as is possible.

Respectfully submitted,

Jim
James P. Trakas
Councilman At Large
Chairman, Utilities and Sewers Committee
Member, Public Buildings and Lands; Community Services

**Calpine Corporation**

THAD HILL
President & Chief Executive Officer
Calpine Corporate Office
717 Texas Avenue, Suite 1000
Houston, TX 77002
713-830-2000

May 2, 2018

VIA ELECTRONIC MAIL AND U.S. MAIL

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Dear Secretary Perry:

Calpine Corporation ("Calpine") is writing to express grave concerns regarding your consideration of action to economically prop up, through subsidies or otherwise, coal and nuclear plants in the PJM Interconnection, L.L.C. ("PJM") region through the use of emergency powers under Section 202(c) of the Federal Power Act (the "FPA"),¹ or any other statute, including the Defense Production Act (the "DPA")² or the Fixing America's Surface Transportation Act (the "FAST Act").³ We understand that you are considering this action as evidenced by the establishment of the DOE portal for the receipt of materials related to FPA Section 202(c), and as a result of the March 29, 2018 application by FirstEnergy Solutions Corp. and its subsidiaries (together, "FES") seeking an emergency order under Section 202(c).

The competitive power markets have delivered billions of dollars in new, private investment, leading to lower prices to consumers for almost two decades. The foundation on which this success has been built is America's belief in open markets. Participants in these markets need to compete on a level playing field. The proposed actions would tilt the table and not only undermine, but potentially destroy, new private competitive investment, and perhaps more importantly, substantially add to the cost of power to consumers in the region. It also will harm the natural gas industry by reducing demand for this beneficial and abundant fuel source. Mr. Secretary, there is no crisis or national threat that justifies such action.

¹ 16 U.S.C. § 824a(c).

² 50 U.S.C. § 4501, *et seq.*

³ Pub. L. No. 114-94.

Introduction

Calpine is an independent power producer that has approximately 27,000 megawatts of generation in operation or under construction in 18 states and Canada. Backed by a fleet of advanced-technology power plants, Calpine's retail operations also provide access to clean, flexible and reliable resources in competitive markets throughout the United States. As both a producer and a provider of electricity operating in 25 states, Calpine has strongly supported efforts by Congress, the Federal Energy Regulatory Commission ("FERC"), and regional transmission organizations ("RTOs") and independent system operators ("ISOs") to implement competitive wholesale markets. By encouraging entrepreneurialism, these markets have lowered costs for consumers, while avoiding the inefficiencies that historically resulted from central planning and having the government pick winners and losers.

The Requested Action Would Harm Competitive Markets

On March 29, 2018, FES filed an application with you requesting an emergency order under Section 202(c) of the FPA requiring PJM to provide massive subsidies to nuclear and coal-fired generation facilities, including those owned by FES (the "FES Request").⁴

Calpine is seriously concerned about the unprecedented harm that FES's request would have on PJM's competitive power market. PJM's market relies on competition between suppliers to lower costs and promote efficiency, while encouraging the retirement of less efficient generation facilities. But FES now asks the Secretary to undercut this competitive framework by ordering PJM to pay "cost-based rates that provide for full cost recovery" to certain nuclear and coal-fired generation facilities in PJM that have proven to be uneconomic.⁵ These requested subsidies would render a substantial portion of the generation in PJM completely immune to market signals, which is anathema to market principles. As a result:

- Older, inefficient facilities would remain in the market; and
- Subsidized facilities can be expected to offer their energy and capacity at prices that are at or close to zero because they are "guaranteed" payment, thereby depressing market prices.
 - PJM recently explained that only a small amount of subsidized generation will have significant impacts on clearing prices. For example, adding 6,000 megawatts of subsidized generation submitting zero-priced offers in the

⁴ Calpine understands that the Secretary has not yet established notice and comment procedures with respect to the FES Request. See Department of Energy, Office of Electricity Delivery & Energy Reliability, DOE's Use of Federal Power Act Emergency Authority, <https://www.energy.gov/oe/services/electricity-policy-coordination-and-implementation/other-regulatory-efforts/does-use>. Accordingly, Calpine is not addressing each of the numerous flaws in the FES Request at this time, and is instead submitting this letter to highlight at a high level the irrevocable and severe harm that would result if FES's request is granted.

⁵ FES Request at 31.

“Outside MAAC” portion of PJM would represent only four percent of the supply in that area, but would be expected to decrease clearing prices for capacity by as much as 21 percent.⁶

- At the same time, adding only 2,000 MW of subsidized, zero-priced generation in the EMAAC Locational Deliverability Area of PJM would reduce clearing prices by a full third.⁷
- Given that coal-fired generating facilities make up 33 percent of the generation in PJM, and nuclear generating facilities make up another 18 percent of PJM’s generation,⁸ the impact of the requested subsidies on PJM’s clearing prices will be devastating.

It merits emphasis that, by impacting market prices, the requested subsidies for nuclear and coal facilities will engender the need for additional subsidies to support other classes of resources. Lowered clearing prices will result in non-subsidized generators being squeezed out of the market, even if they are more efficient than the subsidized nuclear and coal facilities. In particular, gas generators that are wholly dependent on market revenues will either not clear in PJM’s energy and capacity markets or, even if they do clear, will not receive sufficient revenues to cover their operating costs. Loss of gas generation will, in turn, harm consumers – not only is generation fueled by natural gas highly efficient, but it also provides quick-ramping capability that is necessary to maintain grid reliability in the face of increased usage of renewable resources that have highly variable generation output.⁹ Accordingly, gas generators that are not able to survive on the depressed market prices can be expected to request that the Secretary provide them with similar subsidies under Section 202(c) of the FPA or otherwise. Depressed market prices will also discourage the development of new generating facilities to meet demand, and likely mean that new facilities will only be developed with guaranteed cost support. In short, the FES Request would, if granted, strangle the vibrant competitive markets that have provided benefits for consumers, and necessitate a return to the inefficiencies of traditional cost-based ratemaking.

⁶ Capacity Repricing or in the Alternative MOPR-Ex Proposal: Tariff Revisions to Address Impacts of State Public Policies on the PJM Capacity Market, Attachment E, Affidavit of Adam Keech on behalf of PJM Interconnection, L.L.C., ¶ 7, FERC Docket No. ER18-1314-000 (filed Apr. 9, 2018).

⁷ *Id.*, ¶ 8.

⁸ See PJM Interconnection, L.L.C., *PJM’s Evolving Resource Mix and System Reliability* (Mar. 30, 2017), at 9, <http://www.pjm.com/~media/library/reports-notice/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx>.

⁹ See, e.g., U.S. Department of Energy, *Staff Report to the Secretary on Electricity Markets and Reliability* (Aug. 2017), at 11 (“DOE Report”), https://www.energy.gov/sites/prod/files/2017/08/f36/Staff%20Report%20on%20Electricity%20Markets%20and%20Reliability_0.pdf; The Brattle Group, *Diversity of Reliability Attributes, A Key Component of the Modern Grid* (May 17, 2017), at 3, https://sites.hks.harvard.edu/hepg/Papers/2017/Brattle_20170517-API-Diversity-of-Attributes.pdf.

FES also has failed to substantiate its claims that an “emergency condition” exists in PJM.¹⁰ As FERC has already determined, after reviewing thousands of pages of comments and evidence submitted by various parties (including FES), there is no basis for FES’s claims that past or planned retirements of nuclear and coal facilities have resulted in a threat to reliability or resilience in PJM or elsewhere.¹¹ PJM has also confirmed that there is no immediate threat to system reliability,¹² and that PJM did not have to rely on coal-fired generating units to avoid blackouts during a prolonged cold snap from December 27, 2017 to January 7, 2018, but voluntarily chose to do so because the cost of coal was lower than the cost of natural gas during that time.¹³ In fact, evidence demonstrates that the nuclear and coal retirements identified in the FES Request are expected and warranted given the age and relative inefficiency of such facilities.¹⁴

In light of the lack of an immediate threat in PJM, Calpine strongly urges the Secretary to reject FES’s request and permit FERC, working with PJM and other RTOs and ISOs, as well as the North American Electric Reliability Corporation, to continue their efforts to address any potential reliability and resilience issues.¹⁵

Alternative Approach

If, notwithstanding this and other submissions, you continue to have resilience or reliability concerns, we urge you to take a transparent and deliberate approach rather than rushing to judgment at high risk of making a decision that could haunt markets and, consequently, consumers and the industry, for many years to come. As explained above, notwithstanding the efforts of FES and coal interests to create a perception of urgency, there is no immediate threat. In particular, PJM has stated that, even those FES units that have announced their retirement will generally remain operational until at least May 2021.¹⁶ And on April 30, 2018, PJM issued a notification definitively concluding that the retirement of FES’s generating units “is not expected to adversely

¹⁰ FES Request at 1.

¹¹ See *Grid Reliability & Resilience Pricing*, 162 FERC ¶ 61,012 at P 15 (2018) (“*Grid Reliability*”), *reh’g pending*.

¹² See Letter from Vincent P. Duane of PJM Interconnection, L.L.C. to the Honorable James Richard Perry re: FirstEnergy Solutions’ Request for Emergency Relief under Section 202 of the Federal Power Act (Mar. 30, 2018), <http://www.pjm.com/-/media/documents/other-fed-state/20180330-response-to-fe-solutions-request-for-emergency-relief.ashx> (“PJM March 30 Letter”).

¹³ See PJM Interconnection, L.L.C., *Perspective and Response of PJM Interconnection to National Energy Technology Laboratories Report Issued March 13, 2018*, <http://www.pjm.com/-/media/library/reports-notices/weather-related/20180413-pjm-response-to-netl-report.ashx?la=en>.

¹⁴ See, e.g., DOE Report at 7, 23 (indicating that coal facilities that recently retired had an average age of 54 years, while the expected life of such facilities is 40 years); *id.* at 25, 32 (many of the nuclear facilities that have retired are single-unit plants that have high costs).

¹⁵ See generally *Grid Reliability*, 162 FERC ¶ 61,012 (initiating proceedings).

¹⁶ See PJM March 30 Letter.

affect the reliability of the PJM Transmission System due to a combination of remedial measures.
...”¹⁷

There is more than adequate time for further study and deliberation on this issue. Indeed, as a result of your prior notice of proposed rulemaking, FERC has already directed PJM, as well as the other RTOs and ISOs, to identify and address any resilience concerns. Moreover, PJM also announced on April 30, 2018, that it is commencing an effort “to analyze fuel security vulnerabilities and establish criteria to assess areas in the PJM system that could face future fuel security issues,” and to implement market solutions to allow eligible resources to compete to meet those criteria.¹⁸ Consequently, there is no urgency, and a rush to judgment will undermine PJM’s current work, thereby doing great harm without advancing the cause of national security beyond what the markets already provide.

In the event that you nevertheless believe some action is warranted at this time, any relief should be tailored to minimize adverse impacts on the competitive markets. In particular, to the extent that you decide it is necessary to grant FES’s request for cost-based compensation, such compensation should be on an interim basis only and should further be contingent on the subsidized facilities operating on a standby basis, and not participating in the PJM energy or capacity markets unless and until FERC declares that there is an emergency. These limitations will not correct the inefficiencies resulting from the requested subsidies, but will at least help protect the viability of PJM’s competitive markets.

¹⁷ Letter from Steven R. Pincus of PJM Interconnection, L.L.C. to the Honorable James Richard Perry re: FirstEnergy Solutions’ Request for Emergency Relief under Section 202 of the Federal Power Act (Apr. 30, 2018), at 4, <http://www.pjm.com/-/media/documents/other-fed-state/20180430-motion-to-intervene.ashx>.

¹⁸ See PJM Interconnection, L.L.C., *PJM Announces Next Phase of Grid Resilience Initiative – Grid operator to examine fuel security risks* (Apr. 30, 2018), http://www.pjm.com/-/media/about-pjm/newsroom/2018-releases/20180430-news-release-fuel-security-initiative_.ashx.

Conclusion

We are convinced that there is no authority or basis under Section 202(c) of the FPA, the DPA, or FAST Act that justifies action to subsidize or otherwise assist uneconomic power plants. There is no industry or national security emergency. PJM has made clear there is no reliability concern that needs to be addressed now. There is no evidence that the supply chain for natural gas suffers from systemic vulnerability. PJM is reviewing resiliency and fuel security issues. In short, there simply is no need for DOE to take action at this time. Against this backdrop, the requested action would be antithetical to the principles of free markets, for no legitimate reason. It would harm consumers, generators (other than coal or nuclear generators), and the natural gas industry. We therefore urge you to reject or ignore FES's self-motivated plea for you to grant its application, and not to take any other action that would have government picking winners and losers.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Thad Hill', is positioned above the printed name.

Thad Hill
President & Chief Executive Officer

cc: The Honorable Kevin J. McIntyre, Chairman, FERC
The Honorable Neil Chatterjee, Commissioner, FERC
The Honorable Richard Glick, Commissioner, FERC
The Honorable Cheryl A. LaFleur, Commissioner, FERC
The Honorable Robert F. Powelson, Commissioner, FERC

From: Malloy, Brian
To: AskOE
Subject: First Energy 202(c) Application
Date: Tuesday, May 01, 2018 2:54:44 PM
Attachments: [October 2017 IBEW 4th District.pdf](#)
[May 2017 IBEW 4th District.pdf](#)

Document 138

Dear Secretary Perry:

The International Brotherhood of Electrical Workers (IBEW), Fourth District, represents roughly 50,000 workers employed in a variety of industries across Ohio, Kentucky, West Virginia, Virginia, Maryland, and the District of Columbia. I am writing to encourage you to issue a Section 202(c) emergency order as requested by FirstEnergy Solutions Corporation (FirstEnergy) in its March 29, 2018 application.

The IBEW Fourth District supports all generation sources and believes that grid reliability can be achieved by acknowledging and supporting the unique traits of each generation source. The IBEW supported the Department of Energy's (DOE) study of grid reliability and resiliency and was pleased with the DOE's findings. In the aftermath of that study, I wrote in support of the DOE's Grid Resiliency Pricing Rule. As detailed in FirstEnergy's application for a Section 202(c) emergency order, the Federal Energy Regulatory Commission (FERC) has indicated somewhere between 22,000 and 30,000 megawatts of capacity in PJM alone are at risk of closure. This is in addition to recent and announced baseload retirements. Notwithstanding, FERC rejected the Grid Resiliency Pricing Rule. FERC's rejection of the proposed rule combined with the loss of baseload power make it necessary for you to exercise your Section 202(c) authority in a timely manner.

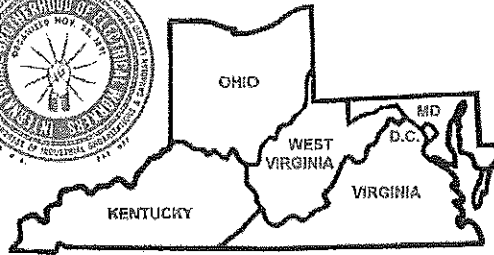
In the IBEW's Fourth District there are thousands of members and consumers who will be impacted by your decision on FirstEnergy's application. I respectfully urge you to grant its request and ensure that the market and grid are prepared for increased energy consumption over the coming months.

Sincerely,

BRIAN G. MALLOY
INTERNATIONAL VICE PRESIDENT
I.B.E.W. FOURTH DISTRICT
5100 BUCKEYSTOWN PIKE, SUITE 255
FREDERICK, MD 21704
o: 301-378-7014 c(b) (6)
www.ibew.org
www.ibewhourpower.com



**INTERNATIONAL
BROTHERHOOD OF
ELECTRICAL WORKERS
FOURTH DISTRICT**



LONNIE R. STEPHENSON
International President

KENNETH W. COOPER
International Secretary-Treasurer

BRIAN G. MALLOY
*International Vice President
Fourth District*

5100 Buckeystown Pike, Suite 255 • Frederick, MD 21704 • (301) 378-7014 • Fax (301) 378-7024 • IVPD_04@ibew.org

May 22, 2017

Mr. Rick Perry
United State Secretary of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Dear Secretary Perry:

The International Brotherhood of Electrical Workers, Fourth District, represents roughly 50,000 workers employed in a variety of industries across Ohio, Kentucky, West Virginia, Virginia, Maryland, and the District of Columbia. From utilities to rail, many IBEW represented industries have direct experience with baseload power and the electric grid. Safety, efficiency, reliability of generation and the grid are of utmost importance to the IBEW. I appreciate your April memorandum calling for a study that will examine issues regarding the long-term reliability and resiliency of the grid.

I want to take this opportunity to stress the importance of International President Stephenson's comments in his May 16, 2017 letter to you. The IBEW Fourth District supports all generation sources and believes grid reliability and resiliency can be achieved by acknowledging and supporting the unique traits of each generation source. As President Stephenson stated, it is critical to recognize the importance of plants that can operate efficiently 24 hours a day and have on-site fuel supplies.

Grid reliability and resiliency also depend on a skilled workforce that is ready to operate and maintain baseload power plants. In the Fourth District alone, there are thousands of members who are either directly or indirectly regularly employed, ensuring these plants are operating safely and efficiently. These are good jobs that allow IBEW members to support their local economies.

With energy consumption projected to increase steadily over the next two decades, it is important that the market and grid are prepared. I look forward to working with you and providing additional district-specific information as needed.

Sincerely,

Brian G. Malloy
International Vice President
IBEW Fourth District

BGM/lcm
Enclosure

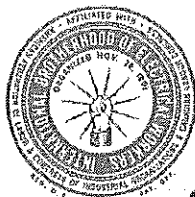
AMERICAN
OVERSIGHT

DOE-17-0427-B-001763



**INTERNATIONAL
BROTHERHOOD OF
ELECTRICAL WORKERS
FOURTH DISTRICT**

4-552781-81-8



LONNIE R. STEPHENSON
International President

KENNETH W. COOPER
International Secretary-Treasurer

BRIAN G. MALLOY
*International Vice President
Fourth District*

5100 Buckeystown Pike, Suite 255 • Frederick, MD 21704 • (301) 378-7014 • Fax (301) 378-7024 • IVPD_04@ibew.org

October 23, 2017

Federal Energy Regulatory Commission
Office of the Secretary
888 First Street, NE
Washington, DC 20426

Re: Proposed Grid Resiliency Pricing Rule, RM 18-1-000

Dear Secretary Bose:

The International Brotherhood of Electrical Workers (IBEW), Fourth District, represents roughly 50,000 workers employed in a variety of industries across Ohio, Kentucky, West Virginia, Virginia, Maryland, and the District of Columbia. Many IBEW-represented industries have direct experience with baseload power generation and the electric grid. On behalf of the workers in the Fourth District, I write in support of the Department of Energy's (DOE) "Grid Resiliency Pricing Rule."

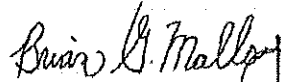
In May of this year, I wrote to the DOE in support of their study of reliability and resilience of the electric grid. In late August, the findings of that study were published, echoing many of the concerns the IBEW has been voicing for years. As discussed in the attached letter from IBEW International President Stephenson, baseload coal and nuclear power plants can operate efficiently 24 hours a day and are unique in that they have on-site fuel sources. These plants are described by the DOE in the proposed rule as "fuel secure" and because of this attribute, coal and nuclear fueled generation are essential for long-term grid reliability and resiliency.

While the IBEW supports all generation sources, the Grid Resiliency Pricing Rule is necessary to ensure coal and nuclear generation are adequately compensated. Despite the aggressive timeline, the proposed changes can be accomplished without disruption of the current market structure. I respectfully

urge the Federal Energy Regulatory Commission to adopt this proposed rule to ensure a balanced, diverse energy mix that can meet future consumer demand.

I look forward to working with you and providing district-specific information as needed.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Brian G. Malloy". The signature is fluid and cursive, with a large loop at the end.

Brian G. Malloy
International Vice President
IBEW Fourth District

Enclosure



**INTERNATIONAL
BROTHERHOOD
OF ELECTRICAL
WORKERS®**

900 Seventh Street, NW
Washington, DC 20001
202.833.7000
www.ibew.org

LONNIE R. STEPHENSON
International President

KENNETH W. COOPER
International
Secretary-Treasurer

May 16, 2017

Mr. Rick Perry
United States Secretary of Energy
1000 Independence Ave., S.W.
Washington, DC 20585

Dear Secretary Perry:

On behalf of the 750,000 active members and retirees of the International Brotherhood of Electrical Workers (IBEW), I write in support of your directive to "initiate a study to explore critical issues central to protecting the long-term reliability of the electric grid" The IBEW represents individuals employed in a variety of fields related to the grid including utilities, construction, manufacturing, and rail. Our practical knowledge of the reliability of the grid makes the IBEW uniquely suited to comment and provide input on the importance of baseload power plants.

In January, the U.S. Energy Information Administration issued its Annual Energy Outlook for 2017.¹ Energy consumption is set to increase 5-11% between 2016 and 2040.² This projection underscores the necessity of our nation's coal and nuclear baseload power plants. Unfortunately, in many areas baseload plants are closing, sometimes prematurely, because of economic challenges. These challenges are partially because of numerous Environmental Protection Agency regulations that the IBEW has provided comment on in addition to subsidies and low natural gas prices.

Baseload power plants need to be appropriately compensated for the megawatts of power they generate. Unlike other generation sources, baseload coal and nuclear power plants can operate efficiently 24 hours a day and provide frequency support services essential to reliability. In addition, on-site fuel supplies make these plants the most reliable because of their ability to withstand severe weather, infrastructure issues, or other catastrophic, unexpected national security events.

For your consideration as a part of the study, I would like to submit the attached documents. In addition, I welcome the opportunity for IBEW experts to meet with your Department of Energy experts working on this important study and implementation plan to discuss our position in greater detail.

Sincerely yours,

Lonnie R. Stephenson
International President

LRS:mlm
Enclosures

¹ U.S. Energy Information Administration, Annual Energy Outlook 2017 with projections to 2050 (Jan. 2017), [http://www.eia.gov/outlooks/aeo/pdf/0383\(2017\).pdf](http://www.eia.gov/outlooks/aeo/pdf/0383(2017).pdf).

² *Id.* at 4.

From: Brad Stevens
To: AskOE
Subject: FirstEnergy Solutions Request for 202(c) Emergency Order
Date: Thursday, May 03, 2018 2:28:19 PM
Attachments: [IBEW Local 50.pdf](#)

On October 23, 2017 I filed comments with FERC outlining Local Union 50 support for the proposed Grid Reliability and Resiliency Pricing Rule (Docket No. RM18-1-000). I have attached a copy of my comments. The need for solid, reliable baseload generation assets cannot be overstated. We urge you to issue an emergency order as requested by FirstEnergy Solutions under section 202(c) of the Federal Power Act.

Brad Stevens
President - Business Manager
Local Union 50, International Brotherhood of Electrical Workers

Local 50 Web Site

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October 23, 2017

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**Grid Reliability and
Resiliency Pricing**

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Docket No. RM18-1-000

**COMMENTS OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL
WORKERS, LOCAL UNION 50 IN SUPPORT OF THE PROPOSED RESILIENCY
RULE**

In accordance with the Federal Energy Regulatory Commission's ("FERC" or the "Commission") October 2, 2017 notice and the Commission Staff's October 4, 2017 notice, Local 50 of the International Brotherhood of Electrical Workers (Local 50) respectfully provides our initial comments on the Secretary of Energy's ("Secretary") September 28, 2017 proposed rulemaking (the "Proposed Rule").

On September 28, 2017, the Department of Energy ("DOE") issued the "Grid Resiliency Pricing Rule" (the "Proposal") directing the Federal Energy Regulatory Commission ("FERC") to adopt a rule requiring operators of organized markets to "ensure that certain reliability and resiliency attributes of electric generation sources are fully valued." Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the nation.

We have grown increasingly concerned in recent years that well-intended public policy initiatives at both the federal and state level have lost sight of the first principle of the electric utility business: maintaining reliability at all times. This vital work of providing reliability at all times has provided well-paying, honorable work for our members for many

decades. That is why we have been distressed to see the retirement of well running electric generation facilities, primarily coal, in regulated states and nationwide. We are also mindful of the ongoing threats facing the nuclear industry in nominally deregulated states (we refer to such states as nominally deregulated in view of the numerous public policy interventions to favor particular resources). The result of premature retirement of power plants has been loss of opportunity for hard working men and women in addition to reliability threats.

IBEW Local 50 strongly supports the Proposal and shares the Secretary's urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members' loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC has the requisite basis to act now.

We were pleased that the Secretary's proposed rule has started an important conversation around pricing for resilience and reliability. We believe that inherent in such discussion is a greater focus on maintaining the fuel diversity that has benefitted our members, the nation's economy, and national security. We note that while this issue was often discussed, it was nowhere near the top of the energy policy agenda until the Secretary's proposed rule was issued. We are grateful to the Secretary for highlighting the importance of this issue and for moving it to the top of the agenda.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Brad Stevens
President & Business Mgr.
IBEW Local 50
1400 E. Nine Mile Road, Suite 50
Highland Springs, VA 23075
804-328-2972
brad.stevens@ibew50.org

II. DESCRIPTION OF IBEW LOCAL 50

IBEW Local 50 is a progressive labor organization that represents more than 3,000 individuals employed by Dominion Energy, Southern Company, First Energy, and Craig-Botetourt Electric Cooperative. These men and women keep our electrical grid operating 24 hours a day, seven days a week. Our members work in electric generation facilities of all types, as well as in transmission and distribution of electricity to some of our nation's most essential facilities, including the world's largest naval base, the Pentagon, and numerous other military, intelligence, and homeland security installations. Accordingly, we are mindful of the need to deliver around-the-clock electricity 365 days a year to keep our nation safe and secure, our economy functioning, and our homes heated, cooled, and lit.

III. DESCRIPTION OF IBEW LOCAL 50'S INTEREST IN PROCEEDING

IBEW Local 50 is party to collective bargaining agreements with owners whose portfolios include baseload coal and nuclear power plants located in Alabama, Georgia, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia. As a result, the wages, terms and conditions of employment of its members may be directly as well as indirectly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, IBEW Local 50 members have a direct and substantial interest in this proceeding. As well, the unique perspective of IBEW Local 50 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across the country has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants provide good paying union jobs and economic opportunities to IBEW Local union members. In addition to direct labor in the generation sector, the maintenance and capital improvement work at the plants supports the local economies by creating thousands of good paying union jobs for contractors. These plants also contribute significant and vital state and local tax revenues that support local schools, police and fire departments and other vital public services. The loss of jobs, tax revenue, and the ripple effect of such losses throughout local economies, will have a severely detrimental impact on the country.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive economy in two ways. First, the preservation of certain plants will avoid the need to replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed, reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our dynamic need for reliable electricity.

Second, premature plant closures will deplete the pool of highly skilled (and specifically trained and experienced) employees. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the nation's electricity supply and on the reliable operation of regional electricity systems.

Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments

to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of nuclear and coal-fired generating facilities it is essential that FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, IBEW Local 50 strongly urges FERC to adopt the rule proposed by the DOE as promptly and comprehensively as possible. We believe that FERC has a sufficient record to act that will be further bolstered by the comments considered in this proceeding. FERC has thoroughly considered the impact of electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of pre-mature closures.

In acting promptly, we believe FERC should also direct the organized market operators to issue a rule that is not only compensatory (and based on the regulatory language of the Proposal) but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

We were pleased that the Secretary's proposed rule has started an important conversation around pricing for resilience and reliability. We believe that inherent in such discussion is a greater focus on maintaining the fuel diversity that has benefitted our members, the nation's economy, and national security. We note that while this issue was often discussed, it was nowhere near the top of the energy policy agenda until the Secretary's proposed rule was issued. We are grateful to the Secretary for highlighting the importance of this issue and for moving it to the top of the agenda.

We urge the Commission to act with the utmost dispatch to work with the Secretary and other policy makers to preserve the around-the-clock resources that power our nation and employ our members. We view the Secretary's action and the Commission's deliberations as bolstering rather than competing with state specific action (such as Virginia's recent decision to encourage life extensions of existing nuclear units). On behalf of our members we stress the need for prompt action, we emphasize the importance of this issue for the day-to-day functioning of our 21st century society, and we encourage the Commission to keep its focus on the big picture needed to address this issue rather than on the vested interests of any particular stakeholder who may argue for delay or inaction.

There is a price to doing nothing. That price is less security for our nation, less prosperity for our economy, and fewer opportunities to the men and women who keep our society running each and every day. For these reasons we urge prompt action.

Thank you for considering our comments.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "B Stevens", with a stylized flourish at the end.

Brad Stevens
President & Business Manager
IBEW Local 50

From: Slater, Andrew C. (DOS)
To: AskOE
Subject: Opposition to FirstEnergy Solutions Corp.'s Request for Emergency Action
Date: Thursday, May 03, 2018 12:25:48 PM
Attachments: image005.png
image006.png
DPA FES letter.pdf

Mr. Secretary,

As the Public Advocate for the state of Delaware, I want to voice our opposition to FirstEnergy Solutions Corp.'s request for Emergency Action at the Department of Energy. Attached, please find our letter to Mr. Francis Brooke at the White House stating such opposition.

Thank you for your service. We look forward to working with you.

Sincerely,

Drew Slater

Public Advocate

29 S. State Street

Dover, DE 19901

Office: 302-241-2550

Toll Free: 1-888-607-2427

Cell: (b) (6)

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Andrew.Slater@state.de.us

Visit us online at www.publicadvocate.delaware.gov/





STATE OF DELAWARE
DEPARTMENT OF STATE
DIVISION OF THE PUBLIC ADVOCATE



820 N. FRENCH STREET, 4TH FLOOR
WILMINGTON, DELAWARE 19801
(302) 577-5077

29 SOUTH STATE STREET
DOVER, DELAWARE 19901
(302) 241-2555

May 3, 2018

Mr. Francis Brooke
Special Assistant to the President, Domestic Energy and Environmental Policy
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

RE: FirstEnergy Solution's Request for Emergency Order

Dear Mr. Brooke:

I am the duly-appointed Public Advocate for the state of Delaware. The Delaware legislature has tasked me with representing the interests of Delaware's ratepayers in federal and state proceedings involving rates and energy policy.

On March 29, 2018, FirstEnergy Solutions Corp ("FES") submitted a Request for Emergency Order Pursuant to Federal Power Act Section 202(c) ("Request" or "Emergency Order Request") to the Secretary of the Department of Energy ("DOE"). I do not believe that FES has presented circumstances that constitute an emergency under Section 202(c) of the Federal Power Act. Further, FES' request attempts to circumvent the legitimate deliberative processes already underway at PJM for its own narrow ends, without any evidence of a legitimate crisis in the capacity market or grid reliability. Therefore, on behalf of the Delaware ratepayers whom I represent, the Delaware Division of the Public Advocate ("DPA") opposes FES' request.

FES' request is overly broad and fails to demonstrate that an emergency exists within the PJM footprint if its coal and nuclear plants are not bailed out. During the December 28, 2017 to January 7, 2018 weather event, the so-called "bomb cyclone," "PJM experienced one of our top 10 winter peak demand days of all time . . . Overall, the grid and the generation fleet performed well. Even during peak demand, PJM had excess reserves and capacity."¹

In addition, "PJM has seen significant new entry (nearly 40,000 MW) of a diverse mix of fuel types since the inception of the capacity market. PJM has experienced over 20,000 MW of coal retirements in the same period, and the average age of the coal units that have retired was over 50 years. In short, the markets have helped to incent new efficient generation of all fuel types and helped to retain existing generation needed to serve electric needs of customers in the PJM footprint."²

¹ PJM Coal Snap Performance. February 26, 2018. <http://www.pjm.com/-/media/library/reports-notice/weather-related/20180226-january-2018-cold-weather-event-report.ashx>. And, as indicated in the January 23, 2018 testimony of PJM CEO Andrew Ott before the U.S. Senate and Natural Resources Committee.

² PJM Coal Snap Performance. February 26, 2018. <http://www.pjm.com/-/media/library/reports-notice/weather-related/20180226-january-2018-cold-weather-event-report.ashx>.

As with any competitive market, price is a key determinant. In this regard, some coal and nuclear plants have become uneconomic. This is the case with FES, as further evidenced by its bankruptcy filing on March 31, 2018.³

If this request is granted, consumers throughout the PJM region will pay higher prices with little if any demonstrated benefit to grid reliability. Meanwhile, there are two pending dockets before the Federal Energy Regulatory Commission (“FERC”) regarding grid resilience and the capacity market construct.⁴ These ongoing dockets will examine the issues raised by FES in a systematic and deliberate way, allowing all interested parties to voice their opinions.

Additionally, consistent with the PJM Tariff, PJM conducted a thorough analysis of its system to determine whether the announced retirements would present reliability issues.⁵ On April 30, 2018, PJM completed this analysis and informed FirstEnergy, “that the deactivation of these generating units is not expected to adversely affect the reliability . . . with these measures, the PJM Transmission system will remain reliable, and therefore the generating units listed above may plan to deactivate as scheduled.”⁶

Again, “PJM can state without reservation there is no immediate threat to system reliability. Indeed, the FES units that announced their expected retirement earlier this week, by their own disclosures, will remain operational in most cases until through May 2021 . . . But even assuming these units do in fact close as of the dates announced, PJM, FERC, and the Department of Energy will have ample time before then to take measures, which at the extreme might include the kind of relief sought in the instant request.”⁷

Given that PJM has stated the system remains reliable, and absent an emergency need (which has not been demonstrated) to subsidize uneconomic coal and nuclear plants, FES’ request for an emergency order should be denied.

Thank you for your consideration of these comments on behalf of the citizens of Delaware.

Sincerely,

/s/ Andrew Slater

Andrew C. Slater
Public Advocate

³ http://www.cleveland.com/business/index.ssf/2018/03/firstenergy_solutions_bankrupt.html

⁴ *Grid Resilience in Regional Transmission Organizations and Independent System Operators*, Docket No. AD18-7-000 (January 8, 2018, and PJM Interconnection submits tariff filing per 35.13(a)(2)(iii): Revisions to Address Impacts of State Public Policies on the PJM Capacity Market, ER18-1314-000 (4/9/2018).

⁵ PJM letter to Energy Secretary Perry regarding FirstEnergy Solutions’ Request for Emergency Relief under Section 202 of the Federal Power Act. March 30, 2018.

⁶ PJM Letter to Secretary of Energy. April 30, 2018.

⁷ PJM letter to Energy Secretary Perry regarding FirstEnergy Solutions’ Request for Emergency Relief under Section 202 of the Federal Power Act. March 30, 2018.

From: Mersol-Barg, Amy E.
To: [AskOE](#)
Cc: [Walker, Bruce](#); [Hoffman, Patricia](#); [Scherman, William S.](#); [Jakubiak, Jeffrey M.](#); [Smith, Christopher](#)
Subject: FirstEnergy Solutions Letter re 202(c) Application
Date: Friday, May 04, 2018 3:26:58 PM
Attachments: [2018.05.04 FES Response to PJM Letter.pdf](#)

Secretary Perry:

Please find attached a letter from FirstEnergy Solutions Corp. ("FES") responding to a letter that PJM filed on April 30, 2018 concerning FES' Section 202(c) application.

Sincerely,

Amy Mersol-Barg

Amy E. Mersol-Barg

GIBSON DUNN

Gibson, Dunn & Crutcher LLP
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This message may contain confidential and privileged information. If it has been sent to you in error, please reply to advise the sender of the error and then immediately delete this message.

May 4, 2018

VIA EMAIL

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: Request for Emergency Order Pursuant to Federal Power Act Section 202(c)

Dear Secretary Perry:

FirstEnergy Solutions Corp. (“FES”), on behalf of its affiliates named in its March 29, 2018 Section 202(c) application (the “Application”), respectfully responds herein to the April 30, 2018 letter to you from PJM Interconnection, L.L.C. (“PJM”) regarding PJM’s Fuel Security Initiative.

PJM’s views on resilience are best summed up by the classic image of Lucy holding a football for Charlie Brown to kick, only to pull it away at the last moment, resulting in Charlie Brown once again flying through the air and landing flat on his back. Indeed, PJM’s latest procedural gambit confirms what FES has been warning DOE (and FERC) about all along: at a time when resilient generation is closing permanently, PJM continues to refuse to act, like Lucy continuing to pull away the football. PJM now suggests that it will take action sometime next year “*if*” PJM thinks it is necessary. Once again, PJM is asking DOE (and the Nation) to “rely on a narrow process run by an entity that has admitted that it does not have a clear view of what resilience is, how to measure it, or how to ensure it.”¹ PJM’s latest letter demonstrates that what was true then remains true now: PJM is either unwilling or unable to address effectively the emergency facing the Nation’s electric grid. But unlike Charlie Brown, DOE does not need to keep blindly “trusting” Lucy since it *can kick the ball now* and address the resilience crisis by granting FES’ Application.

Faced with a growing consensus that something must be done now to address the resilience crisis, and unlike its prior statements to FERC and others eschewing that any real problem exists, PJM now pivots and *belatedly* “recognizes that fuel security raises questions about electric system resilience which go beyond reliability” and that it must “[i]dentify system vulnerabilities and determine attributes . . . that ensure that peak demands can be met during extreme scenarios.”² This sudden revelation rings hollow as it stands in stark contrast to PJM’s

¹ Letter from FirstEnergy Solutions to Rick Perry, U.S. Sec’y of Energy at 1 (Mar. 30, 2018).

² Letter from Steven R. Pincus, Assoc. Gen. Counsel, PJM Interconnection, L.L.C., and Craig Glazer, Vice President, Fed. Gov’t Policy, PJM Interconnection, L.L.C., to Rick Perry, U.S. Sec’y of Energy at 1-2 (Apr. 30, 2018) (“April 30 Letter”).

recent and consistent refusal to acknowledge the problem let alone to act to address resilience issues.³

For example, just two months ago PJM told FERC that: 1) it needed authority to plan for resilience;⁴ 2) it lacked formal resilience criteria;⁵ 3) its existing markets were not designed with resilience in mind;⁶ 4) it required FERC to verify that it correctly identified system threats;⁷ and 5) it lacked requisite information, including real-time conditions on pipelines that support natural-gas fired power plants.⁸ But now PJM asserts all of a sudden that sometime next year it may be capable of identifying resilience attributes and designing a market mechanism to compensate generators for the resiliency benefits they provide “if” action is warranted.

PJM has made a similar about-face with respect to the need for nuclear and coal-fired generation in the electric grid. Following the cold weather in the Eastern United States last winter, Andy Ott, President and CEO of PJM, conceded that “[PJM] couldn’t survive without gas; [PJM] couldn’t survive without coal; [PJM] couldn’t survive without nuclear. [PJM] need[s] them all in the moment.”⁹ Since then, PJM has concluded that its grid “will remain reliable” despite the retirement of three FirstEnergy nuclear plants,¹⁰ representing a combined capacity of approximately 4,000 MW,¹¹ again ignoring concerns related to *resilience*. Further, Mr. Ott recently claimed that “[w]e do not feel we have a vulnerability today, *but will take a look at the system to see if we could have fuel security issues in the future.*”¹²

³ See, e.g., PJM INTERCONNECTION, PJM’S EVOLVING RESOURCE MIX AND SYSTEM RELIABILITY 5-6 (Mar. 30, 2017) (“‘Heavy’ reliance on one resource type, such as a resource portfolio composed of 86 percent natural gas-fired resources, however, raises questions about electric system resilience, which are beyond the reliability questions this paper sought to address.”), <http://www.pjm.com/~media/library/reports-notice/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx>; *Ott Addresses Resilience Importance at Grid 20/20*, PJM INSIDE LINES (Sept. 19, 2017) (quoting Andrew Ott, President and CEO, PJM Interconnection, L.L.C.) (“[Resilience] activities will happen as a part of the discussion. If we don’t do something, it will be done for us.”), <http://insidelines.pjm.com/ott-addresses-resilience-importance-at-grid-2020/>.

⁴ Comments and Responses of PJM Interconnection, L.L.C. at 5-6, *Grid Resilience in Regional Transmission Organizations and Independent System Operators*, FERC Docket No. AD18-7-000 (Mar. 9, 2018).

⁵ *Id.* at 37.

⁶ *Id.* at 66.

⁷ *Id.* at 5.

⁸ *Id.* at 6-8.

⁹ Press Release, Sen. Lisa Murkowski, Hearing Spotlights Importance of Energy Infrastructure, Diverse Fuel Mix (Jan. 23, 2018) (quoting Andrew Ott), <https://www.murkowski.senate.gov/press/release/hearing-spotlights-importance-of-energy-infrastructure-diverse-fuel-mix>.

¹⁰ April 30 Letter at 3-4.

¹¹ *Generation Deactivations*, PJM, <http://www.pjm.com/planning/services-requests/gen-deactivations.aspx> (last visited May 4, 2018).

¹² *PJM Will Test U.S. Mid Atlantic/Midwest Power Grid for Resiliency*, REUTERS (Apr. 30, 2018) (emphasis added), <https://www.reuters.com/article/pjm-power-resiliency/pjm-will-test-us-mid-atlantic-midwest-power-grid-for-resiliency-idUSL1N1S70XK>.

PJM's ever-shifting and inconsistent statements and positions underscore that action is needed, but PJM will not be the one to take it, at least in any meaningful time frame. PJM's latest announcement is nothing more than a delaying tactic. As PJM knows full well, the design and implementation of a "market-based approach" would take years even under the best circumstances. The grid and the Country do not have years. And as the failure of its capacity performance regime shows, PJM has a dismal track record of adopting effective "market based" approaches to these sorts of issues.

The Nation's wholesale electric markets have failed to recognize and properly value the benefits provided by nuclear and coal-fired generators for years, and, as a result, these generators face the imminent choice of whether to retire. PJM's consistent contradictions demonstrate that it lacks a firm grasp on the resilience problems facing the grid today, let alone how to address them, "if" it ever does.

The Department of Energy recently stated that FERC "has not taken sufficient action" despite "studying the underlying economic and regulatory causes of this problem for years" and so "urge[s] FERC to take *immediate* action to stop the loss of fuel-secure capacity."¹³ But the Department of Energy need not and indeed should not wait on FERC. Rather, urgent action by the Department of Energy is the only way to preserve nuclear and coal-fired generation while a long-term solution is developed by DOE and FERC.

Respectfully submitted,

/s/ Rick C. Giannantonio

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¹³ Gavin Bade, *PJM Launches Fuel Security Initiative to Counter Gas Reliance*, UTILITY DIVE (May 1, 2018) (quoting Shaylyn Hines, Spokesperson, Dep't of Energy) (emphasis added), <https://www.utilitydive.com/news/pjm-launches-fuel-security-initiative-to-counter-gas-reliance/522531/>.

From: Jeff Dennis
To: [AskOE](#)
Subject: Legal Analysis/Comments of AEE, API, AWEA, EPSA, INGAA, and NGSA
Date: Monday, May 07, 2018 5:40:34 PM
Attachments: [ATT00001.htm](#)
[Trade Associations Letter and Legal Analysis 5-7-18.pdf](#)

Attached, please find a legal analysis prepared jointly by Advanced Energy Economy (AEE), the American Petroleum Institute (API), the American Wind Energy Association (AWEA), the Electric Power Supply Association (EPSA), the Interstate Natural Gas Association of America (INGAA), and the Natural Gas Supply Association (NGSA) regarding FirstEnergy's application for an emergency order under Section 202(c) of the Federal Power Act.

The legal analysis addresses the unsuitability of Section 202(c), as well as the unsuitability of the emergency provisions of the Defense Production Act (DPA) and Section 215A of the Federal Power Act (added by the FAST Act of 2015), to the economic circumstances claimed by FirstEnergy in its application.

This group of associations, which represents a broad cross-section of the energy industry, respectfully urges Secretary Perry reject FirstEnergy's petition under Section 202(c) of the Federal Power Act, as well as any other related action under the Defense Production Act, Section 215A of the Federal Power Act or any other authority that provides unwarranted "emergency" relief.

Thank you,

Jeff

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May 7, 2018

Via Electronic Mail

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Secretary Perry:

On behalf of Advanced Energy Economy, the American Petroleum Institute, the American Wind Energy Association, the Electric Power Supply Association, the Interstate Natural Gas Association of America, and the Natural Gas Supply Association, we write to oppose any action by the United States Department of Energy (DOE or the Department) that would use any of its emergency authorities as a means to provide economic support to a favored class of power plants. Power plant retirements are a normal, healthy feature of electricity markets. There is no emergency or threat to the national defense on which the Department could lawfully base the exercise of its emergency authorities.

I. Introduction

In October 2017, the Department used its authority under Section 403 of the Department of Energy Organization Act to propose a rule to be implemented by the Federal Energy Regulatory Commission (FERC or the Commission). DOE asserted that wholesale power markets do not adequately price the resiliency attributes of “fuel-secure” power plants. DOE defined fuel-secure power plants as those that maintain 90 days of fuel on site – a requirement that only coal and nuclear plants generally satisfy. DOE proposed that any such plants that are located within organized electric markets and that are not subject to cost-of-service rate regulation by any State or local authority (*i.e.* “merchant” plants) should receive full cost recovery along with a return on equity.

In January 2018, the Commission rejected DOE's proposal unanimously.¹ The Commission emphasized its historic commitment to both reliability and markets, observing that it "has been able to focus on both without compromising its commitment to either."² The Commission rejected the notion that the retirement of certain generators in regional transmission organization and independent system operator (RTO/ISO) markets meant that the prices in those markets were unjust and unreasonable.³ The Commission also concluded that DOE failed to establish that its own proposal was just and reasonable. The Commission observed that DOE's proposal would have extended cost recovery to all eligible units "regardless of need or cost to the system" and that the 90-day criterion would have unduly discriminated against other resources with resilience attributes.⁴

Although the Commission rejected DOE's proposal, terminating the proceeding, it did not ignore the issue DOE raised. FERC instead initiated a new proceeding dedicated to (1) developing a common understanding of resilience, (2) identifying how RTOs/ISOs assess threats to resilience, and (3) examining how RTOs/ISOs mitigate threats to resilience within a market context.⁵ In short, the Commission stayed true to its long-standing commitment to promote both markets and reliability "without compromising its commitment to either."

Though DOE's proposal was not adopted by FERC, there is no question that it was directed at the correct agency. DOE rightly identified FERC as the agency with which to raise concerns about the adequacy of wholesale electricity prices and Sections 205 and 206 of the Federal Power Act as the statutory provisions under which those concerns must be evaluated. In the months following FERC's rejection of the DOE NOPR, however, those urging above-market prices for coal and nuclear plants have moved on to other legal theories in the hopes of achieving the same result by other means.

On March 29, FirstEnergy Solutions and its affiliates (collectively, FirstEnergy) petitioned the Department to use its emergency authority under Section 202(c) of the Federal Power Act to issue an order that would give all merchant coal and nuclear plants in PJM a guaranteed return on equity for four years. On April 18, Senator Manchin wrote to President Trump urging him to invoke the Defense Production Act to support coal and nuclear plants. Senator Manchin followed that letter with a similar request to Secretaries Perry and Mattis on April 25. In the weeks that followed, others have suggested yet another authority, Section 215A of the Federal Power Act, which was enacted as part of the FAST Act of 2015.

These other authorities do not do what their proponents claim. All three rely on a finding that the retirement of certain coal and nuclear plants constitutes either an "emergency" or a threat to the national defense. No such finding can credibly be made. In addition, because these authorities are intended for emergency circumstances and threats to the national defense, they afford narrow

¹ *Order Terminating Rulemaking Proceeding, Initiating New Proceeding, and Establishing Additional Procedures*, 162 FERC ¶ 61,012 (Jan. 8, 2018).

² *Id.* at P 11.

³ *Id.* at P 15.

⁴ *Id.* at P 16.

⁵ See FERC Docket No. AD18-7.

relief to address those circumstances. They do not empower the Department to provide the long-term out-of-market price support that the coal and nuclear plant owners seek. That authority lies with the Commission, which reviews rate proposals pursuant to Sections 205 and 206 of the Federal Power Act to ensure that they are just and reasonable and not unduly discriminatory or preferential.

II. The Orderly Retirement of Inefficient Generators Does Not Pose an Emergency

The question of whether additional market reforms should be pursued to mitigate fuel supply risks should not be conflated with the question of whether an emergency exists today. The former question is receiving active attention through the appropriate channels. FERC, as noted above, has initiated a proceeding on how resilience can be promoted within RTO/ISO markets. PJM (along with the other RTOs/ISOs) is part of that proceeding and has initiated a number of processes to consider market structure improvements that address potential future resilience challenges in its markets.⁶ The intention of those processes, we hope, is to develop analytically sound measures of resilience and a technology-neutral market-based approach that mitigates resilience risks at the lowest cost to ratepayers. But, while FERC and the RTOs/ISOs are taking the concepts of resilience and fuel security seriously, none of them accept the idea that the orderly retirement of uneconomic power plants constitutes an emergency.

FirstEnergy's claim that an emergency exists rests entirely on the observation that some coal and nuclear plants —most importantly those owned by FirstEnergy — are losing money and are therefore likely to retire in the coming years. That is not an emergency. The retirements FirstEnergy complains about will unfold over a period of years and will be carefully planned. FirstEnergy's three nuclear plants would not deactivate until 2021, and very few of the merchant generators FirstEnergy lists in Attachment A to its application have indicated any intention to retire in the near-term. If PJM determines that the retirement of any of these units would compromise system reliability, it can offer those units cost of service compensation under a "Reliability Must Run" contract that would keep those plants online until the reliability issue is resolved. In this case, PJM has completed its 30-day analysis of the deactivation notice from FirstEnergy regarding the retirement of three units (in 2020 and 2021) and found "the deactivation of these generating units is not expected to adversely affect the reliability of the PJM Transmission System due to a combination of remedial measuresWith these measures, the PJM Transmission system will remain reliable, and therefore the generating units listed above may plan to deactivate as scheduled."⁷

The retirements FirstEnergy complains of come in the context of an oversupplied capacity market and flat or declining demand. PJM's most recent capacity auction yielded a 23.9% reserve margin, which well exceeds its target of 16.6%. Reserve margins have grown because new and diverse

⁶ See, e.g., PJM, *Valuing Fuel Security* (April 30, 2018); see also, ISO New England, *Operational Fuel-Security Analysis* (Jan. 17, 2018), https://www.iso-ne.com/static-assets/documents/2018/01/20180117_operational_fuel-security_analysis.pdf.

⁷ PJM, Letter re First Energy Solutions, Corp. Request for Emergency Order Pursuant to Federal Power Act Section 202(c) Submitted March 29, 2018, (April 30, 2018), <http://www.pjm.com/-/media/documents/other-fed-state/20180430-motion-to-intervene.ashx>

generation resources have come online faster than older units have retired,⁸ and because peak loads continue to decline.⁹ For these reasons, PJM has emphasized repeatedly that there is no emergency. PJM's spokesperson put it succinctly:

There is no immediate emergency. Diversity of the fuel supply is important, but the PJM system has adequate power supplies and healthy reserves in operation today, and resources are more diverse than they have ever been. Nothing we have seen to date indicates that an emergency would result from the generator retirements.¹⁰

The performance of the PJM electric grid during the 2018 Bomb Cyclone further demonstrates that no emergency exists. During the eleven-day period of extreme cold, the system performed well. PJM has explained that “[e]ven during peak demand, PJM had excess reserves and capacity.”¹¹ Moreover, from the perspective of system resilience, PJM showed improvement as measured against the 2014 Polar Vortex. Total forced outages were 40,200 MW during the 2014 Polar Vortex, but declined to 23,751 MW in the 2018 Bomb Cyclone. While higher temperatures explain some of this difference, PJM has explained that it is also attributable to “increased investment in existing resources, improved performance incentives, enhanced winterization measures and increased gas-electric coordination.”¹²

FirstEnergy attempts to flip the positive experience of the 2018 Bomb Cyclone on its head by pointing to a single, flawed study claiming that the region would have suffered “interconnect-wide blackouts” had certain coal plants been unavailable.¹³ The study based this alarmist claim on the observation that, during the cold weather, coal plants provided more incremental generation than did natural gas or nuclear plants. As PJM and others have noted, however, the study misunderstood why those coal plants were dispatched more frequently. PJM explained that, under its economic dispatch model, “PJM dispatched coal units because *their costs were lower* during certain hours of the cold snap. Natural gas and nuclear units were not unreliable or otherwise unavailable to

⁸ Across capacity auctions spanning the last ten years, PJM has added 50,792 MW of new generation capacity, 9,485 MW of demand resource capacity, and 2,062 MW of energy efficiency capacity, while retiring or derating 39,639 MW of existing generating capacity. PJM, *2020/2121 RPM Base Residual Auction Results*, <https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2020-2021-base-residual-auction-report.ashx>.

⁹ PJM, *Capacity Repricing or in the Alternative MOPR-Ex Proposal*, FERC Docket No. ER18-1314 (April 9, 2018) at 10 n.24 (citing *PJM Load Forecast Report*, January 2018).

¹⁰ Dan Shingler, *FirstEnergy seeks federal government help for its struggling plants*, CRAIN'S CLEVELAND BUSINESS (March 29, 2018), <http://www.craincleveland.com/article/20180329/news/156551/firstenergy-seeks-federal-government-help-its-struggling-plants>.

¹¹ PJM Interconnection, *PJM Cold Snap Performance Dec. 28, 2017 to Jan. 7, 2018* at 1 (Feb. 26, 2018), available at <http://www.pjm.com/-/media/library/reports-notice/weather-related/20180226-january-2018-cold-weather-event-report.ashx>.

¹² *Id.* at 2.

¹³ National Energy Technology Laboratory, *Reliability, Resilience and the Oncoming Wave of Retiring Baseload Units, Volume I: The Critical Role of Thermal Units During Extreme Weather Events*, (March 27, 2018).

serve the increased customer demand, nor would PJM have faced ‘interconnect-wide blackouts’ without the particular generating units dispatched.”¹⁴

III. The Department Must Reject FirstEnergy’s Petition under Section 202(c)

Section 202(c) of the Federal Power Act authorizes the Department to order generators to run during times of war or other emergencies. Section 202(c) describes such emergencies as including “a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy.”¹⁵ The Department’s definition of “emergency” in its regulations implementing Section 202(c) likewise captures a number of scenarios, all of which it describes as either “unexpected,” “sudden,” or “unforeseen.” As explained above, the orderly retirement of power plants in PJM will unfold over a period of years and in the context of ample supply of generating capacity. There is no “emergency” that could serve as the basis for using the Department’s authority under Section 202(c).

FirstEnergy’s petition seeks to stretch Section 202(c) far beyond what its text can support. Section 202(c) is a “temporary” authority aimed at emergencies; it does not give the Department authority to set national energy policy or to advantage one type of fuel for electric generation over others. After the First Oil Embargo, the Federal Power Commission declined to use its authority under Section 202(c), despite its potential for reducing oil dependence in the electric power sector. The U.S. Court of Appeals for the D.C. Circuit upheld that decision, stating:

We are fully mindful, of course, that current national policy is to discourage reliance on foreign oil, but we cannot fault the Commission for reading Section 202(c) as devoid of a solution. That section speaks of “temporary” emergencies, epitomized by wartime disturbances, and is aimed at situations in which demand for electricity exceeds supply and not at those in which supply is adequate but a means of fueling its production is in disfavor.¹⁶

FirstEnergy’s true problem is not that there is an emergency on the grid, but that its power plants lose money at current market prices. Consequently, its application is a thinly veiled attempt to use Section 202(c) as a substitute for what it could not achieve at the Commission under Sections 205 and 206. It seeks rate assistance for four years, a period that would exceed any conceivable “emergency” time frame. It would apply its rate assistance proposal to *all* coal and nuclear plants, regardless of whether each one is needed to address the purported emergency. Indeed, the only limitation FirstEnergy would impose on the scope of its requested order relates to the type of

¹⁴ PJM, *Perspective and Response of PJM Interconnection to National Energy Technology Laboratories Report Issued March 13, 2018* (April 13, 2018), <http://www.pjm.com/-/media/library/reports-notices/weather-related/20180413-pjm-response-to-netl-report.ashx?la=en>.

¹⁵ 16 U.S.C. § 824a(c).

¹⁶ *Richmond Power & Light v. FERC*, 574 F.2d 610, 615 (D.C. Cir. 1978)(internal citations omitted).

compensation these generators receive, and not whether each generator is necessary to address the supposed emergency.¹⁷

But Section 202(c) is not intended to solve generators' economic problems. As the Assistant Secretary for the Office of Electricity Delivery and Energy Reliability put it recently, "we would never use a 202[c] to stave [off] an economic issue. It's not designed for that."¹⁸ More specifically, Section 202(c) was not designed as a pretext to supersede the Commission's authority over wholesale rates. Where the parties affected by an order do not agree, Section 202(c) ensures that generators receive "just and reasonable" terms for their actions carrying out the order. But that language cannot fairly be read as an independent source of ratemaking authority apart from Sections 205 and 206, given that Section 202(c) was enacted at a time when the Federal Power Commission had authority over the Federal Power Act as a whole.

The Department acknowledged the Commission's exclusive authority over wholesale rates when it first promulgated regulations implementing Section 202(c). The Department stated that it would leave rate issues to the Commission because "this responsibility is vested in the Federal Energy Regulatory Commission (FERC) and must be addressed in its regulations."¹⁹ The Department's regulations, therefore, encourage the use of existing rate schedules for service under Section 202(c) orders, and state that when parties do not agree, FERC, not the Department, has responsibility for resolving "rate issues . . . for determination by that agency in accordance with its standards and procedures."²⁰ DOE's regulations could not be clearer as to which agency bears responsibility for rates. Nonetheless, FirstEnergy requests that the Department, rather than FERC, "step in and determine the just and reasonable compensation."²¹ Neither the Federal Power Act nor the Department's regulations authorize the Department to do so.

IV. The Defense Production Act Does Not Contain Authority to Provide Above-Market Pricing to Power Plants

The Defense Production Act was enacted in 1950, at the beginning of the Korean War. Its purpose was to ensure the availability of critical materials for the national defense, and it has been used that way for decades. As explained below, the Defense Production Act cannot be used to command favorable pricing for a favored class of power plants. Moreover, to invoke the concept of "national defense" for what is transparently a domestic effort to boost an uneconomic segment of industry would be an unprecedented abuse of the Act. The Defense Production Act has enjoyed bipartisan

¹⁷ See FirstEnergy Request at 31 (excluding from the scope of its request generators that "recover any of their capital or operating costs through rates regulated by a duly authorized state regulatory authority, municipal government, or energy cooperative").

¹⁸ Gavin Bade, UTILITY DIVE, *DOE 'would never use' emergency order for uneconomic plants, Walker says* (Feb. 20, 2018), <https://www.utilitydive.com/news/doe-would-never-use-emergency-order-for-uneconomic-plants-walker-says-1/517455/>.

¹⁹ See Economic Regulatory Administration, Energy, *Emergency Interconnection of Electric Facilities and the Transfer of Electricity to Alleviate an Emergency Shortage of Electric Power*, 46 Fed. Reg. 39,984, 39,985 (Aug. 6, 1981).

²⁰ 10 C.F.R. § 205.376.

²¹ FirstEnergy Request at 32.

support for decades and must maintain that support if it is to be re-authorized next year.²² Using this statute to favor a particular industry that is struggling in the competitive markets would threaten that support and risk the loss of an important tool that could be needed to ensure national security.

Because its purpose lies in the national defense, the authority conferred in the Defense Production Act allows certain types of market interventions that are rare in American law. Even so, as broad as it is, the Defense Production Act is not broad enough to do what the supporters of these uneconomic power plants would like. The Defense Production does not allow the government to set prices. Nor does it allow the government to force market participants to buy products or services they do not wish to buy.

Those urging the Executive branch to use the Defense Production Act to bail out power plants have not identified which provision of the Act they would use. But there are only two possibilities: the prioritization and allocation authorities contained in Sections 101(a) and (c), and the financial assistance provisions contained in Title III. Neither set of provisions can be used to force consumers to pay above-market prices for electricity.

a. The Authority to Prioritize Contract Performance and to Allocate Materials Does not Include the Authority to Force Purchases or to Set Prices

Section 101(a) of the Defense Production Act empowers the President to require priority performance of contracts or orders deemed “necessary or appropriate to promote the national defense” and to allocate materials, services, and facilities in a manner necessary to “promote the national defense.” To apply Section 101(a) to products in the civilian market, the President must also find that the material being prioritized or allocated “(1) . . . is a scarce and critical material essential to the national defense, and (2) that the requirements of the national defense for such material cannot otherwise be met without creating a significant dislocation of the normal distribution of such material in the civilian market to such a degree as to create appreciable hardship.”²³ Section 101(c) of the Act authorizes prioritization and allocation specifically for materials, equipment, and services necessary to “maximize domestic energy supplies” upon a finding that such materials are “scarce, critical, and essential—(i) to maintain or expand exploration, production, refining, transportation; (ii) to conserve energy supplies; or (iii) to construct or maintain energy facilities.”²⁴ With respect to all forms of energy, Sections 101(a) and (c) have been delegated by the President to the Secretary of Energy.²⁵

Sections 101(a) and (c) are commonly used to prioritize the performance of defense contracts over civilian contracts. For example, if a factory has a contract to supply the military with a particular item and if the need for that item becomes urgent, the Department of Defense may invoke Section 101(a) and issue a “rated order” to accelerate performance of its own contract ahead of civilian

²² 50 U.S.C. § 4564(a) (stating that the Defense Production Act “shall terminate on September 30, 2019”).

²³ *Id.* § 4511(b).

²⁴ *Id.* § 4511(c).

²⁵ Exec. Order 13603, 77 Fed. Reg. 16651 (Mar. 22, 2012).

orders at the same factory. The Department of Energy and its predecessor agencies have used the Section 101 authorities sparingly. In 1974 and 1975, the Federal Energy Administration used Section 101(a) to ensure the availability of materials necessary for timely completion of the Trans-Alaska Pipeline,²⁶ a project that had strategic importance to the United States after the First Oil Embargo. And in 2001, during the California Energy Crisis, the Department of Energy used Sections 101(a) and (c) of the Defense Production Act alongside the Natural Gas Policy Act of 1978 to ensure performance of contracts to deliver natural gas to Pacific Gas & Electric, which needed the natural gas both to serve retail customers and for electric power generation.

Providing FirstEnergy with the relief it seeks would first require that the President declare that electricity supplies are scarce. As described above, such a declaration cannot be credibly made. But even assuming it could, two further discrete government actions would be necessary: (1) the government must force PJM (or load-serving entities directly) to buy electricity from the favored class of generators, and (2) the government must force PJM (or the load-serving entities) to make those purchases at above-market rates they have not agreed to. Neither of these actions lies within the authority of the Defense Production Act.²⁷

Section 101 of the Defense Production Act gives the government the extraordinary power to force private actors to *sell* their products to the government (or its contractors) when those private actors are contractually committed to sell to other parties. But nothing in the Act would authorize the far greater intrusion of forcing private actors to make purchases against their will, even if such purchases were somehow shown to “promote the national defense” or to “maximize domestic energy supplies.” Section 101 is directed at materials found to be “scarce.” Nowhere does it contemplate that buyers would need any encouragement, much less compulsion, to buy the materials that have been prioritized or allocated.

Moreover, even were the Defense Production Act turned upside down to authorize the government to force private actors to make purchases against their will, the Act provides no authority to set the price for those purchases. The original Title IV to the Defense Production Act authorized the President to fix prices, but that authority expired in 1953.²⁸ Section 101 authorizes the President to prioritize performance of contracts,²⁹ but not to wield the far greater power of dictating the price or other terms of the contract it has prioritized. Indeed, other provisions in the Act foreclose the possibility that it may be used to set prices: Section 104 states that the authorities in Title I,

²⁶ Trans-Alaska Pipeline Priorities Assistance for Construction, 39 Fed. Reg. 34608 (Sept. 26, 1974).

²⁷ There are numerous ways in which the use of the Defense Production Act for this purpose would stray from the language of the Act and its implementing regulations. We have chosen to highlight two of the most fundamental.

²⁸ Defense Production Act Amendments of 1953, Pub. L. No. 83-95, 67 Stat. 129.

²⁹ Section 101(a) also allows the President to “require acceptance” of contracts and orders. 50 U.S.C. § 4511(a). But that authority must be read in light of the statement that it has been included “for the purpose of assuring . . . priority.” See *Hercules Inc. v. U.S.*, 24 F.3d 188, 203 (Fed. Cir 1994) *aff’d* 516 U.S. 417 (1996). The authority to require sellers of critical materials to accept government contracts for purposes of assuring priority delivery does not confer authority to require buyers to accept contracts for purposes of imposing above-market prices.

including Section 101, may not be used to impose price controls without prior authorization by Congress;³⁰ Section 707 states that the prices, terms, and conditions of sale under a prioritization or allocation order should not differ from those for “generally comparable orders or contracts;”³¹ and Section 106, which designates energy as a “strategic and critical material,” states that no provision of the Act, “by virtue of such designation,” should be read to confer any authority to control the “pricing” of any form of energy, including electricity.³²

The regulations implementing Section 101 of the Defense Production Act also show that the authority to prioritize contract performance does not confer the authority to set prices. Those regulations state that priority assistance may not be provided “when a person is attempting to . . . [s]ecure a price advantage.”³³ They also prohibit persons working under allocation or prioritization orders from “charging higher prices or imposing different terms and conditions than for comparable unrated orders.”³⁴ Finally, we note that after the Department of Energy issued its order to address the 2001 California Energy Crisis, it made clear that any changes to the price of natural gas supply contracts in California would have been authorized by the Natural Gas Policy Act, not by the Defense Production Act.³⁵

b. The Defense Production Act’s Loan and Subsidy Provisions May Not Be Used in these Circumstances

Title III of the Defense Production Act confers authority to make loans and loan guarantees in order to reduce “shortfalls of industrial resources, critical technology items, or materials essential for the national defense.”³⁶ As we explain above, there is no such shortfall. But even if such a finding could be made, loans and loan guarantees would be unavailable for these generators for two reasons. First, loans and loan guarantees under the Defense Production Act must be supported by funds appropriated for that purpose to pay for the government’s credit risk.³⁷ Because Congress has appropriated no funds to support these loans, the Department of Defense cannot issue them. Second, even if funds were appropriated, the loans and loan guarantees would be available only if “the prospective earning power of the loan applicant and the character and value of the security pledged provide a reasonable assurance of repayment of the loan in accordance with the terms of

³⁰ 50 U.S.C. § 4514(a).

³¹ *Id.* § 4557.

³² *Id.* § 4516.

³³ 15 C.F.R. § 700.55; 10 C.F.R. § 217.44.

³⁴ 15 C.F.R. §§ 700.13(a)(2) and 700.35(b); 10 C.F.R. §§ 217.33(a)(2) and 217.55(b).

³⁵ *See The California Energy Crisis and Use of the Defense Production Act: Hearing before the S. Comm. on Banking, Housing, and Urban Affairs, 107th Cong. 27 (2001) (Response to Written Questions of Senator Gramm from Eric J. Fygi: “Q.2a. Was the Natural Gas Policy Act or the Defense Production Act used to set prices under the Order? A.2a. To the extent that it might have proven necessary to ‘set prices’ under the emergency order, the authority to do so would have been the Natural Gas Policy Act.”).*

³⁶ *See* 50 U.S.C. §§ 4531- 32.

³⁷ *See id.* §§ 4531(a)(3)(A) and 4532(c)(1)(A) (incorporating provisions of the Federal Credit Reform Act).

the loan.”³⁸ The central argument of FirstEnergy’s application under Section 202(c), and of the Department’s NOPR to FERC, is that coal-fired and nuclear generators are retiring because they lose money under current market conditions – a fact underscored by FirstEnergy’s bankruptcy filing. Given this record, there could be no basis to conclude that loans to these generators come with a “reasonable assurance of repayment.”

Title III also allows for purchase commitments and subsidy payments to address national defense needs.³⁹ But electricity produced from nuclear and coal-fired power plants would not qualify for this type of support. For one, subsidy payments are available only for “raw or nonprocessed material” (which electricity is not) or to address temporary increases in transportation costs affecting critical materials (which is not the reason why aging power plants in PJM are uneconomic).⁴⁰ But, even if these eligibility criteria were overlooked, any assistance under these provisions would be limited to the lesser of the amount of uncommitted appropriated funds available,⁴¹ or \$50 million, absent an Act of Congress specifically authorizing a greater amount.⁴² Needless to say, \$50 million would be insufficient to pay for the subsidy requested by FirstEnergy. In fact, FirstEnergy Solutions’ recent bankruptcy filing reveals that \$50 million would be insufficient to cover the losses of even *one* of its coal-fired power plants for *six months*.⁴³ Providing this “drop in the bucket” of FirstEnergy’s losses would also drain almost completely the funds Congress has made available for *national defense*, not economic favoritism.

V. Section 215A of the Federal Power Act Authorizes Only Temporary Measures in Response to Grid Security Emergencies

In December 2015, Congress enacted the FAST Act, which added a new section, Section 215A, to the Federal Power Act. Section 215A authorizes the Department of Energy to issue “orders for emergency measures” in response to a “grid security emergency.” A “grid security emergency” is

³⁸ *Id.* §§ 4531(a)(2)(D) and 4532(b)(2)(D).

³⁹ *Id.* § 4533.

⁴⁰ *Id.* § 4533(c)(1)(a).

⁴¹ In the most recent appropriations act, Congress appropriated \$67 million for all Defense Production Act financial assistance activities. Consolidated Appropriations Act, 2018, Pub. L. No. 115-141 at 111.

⁴² 50 U.S.C. § 4533(a)(6)(C). The \$50 million limitation was added in the 2014 reauthorization of the Defense Production Act. *See also* 160 Cong. Rec. H7002-04 (daily ed. Jul. 29, 2014). (Statement of Rep. Campbell: “Title III authorizes the President to use loans, purchase commitments, and grants to encourage contractors to establish or expand industrial capacity and produce items that are essential to the national defense that must be domestically produced but are otherwise not economically attractive enough to have a domestic producer. These programs are usually small, typically less than \$15 million, and in the history of the DPA, going back to the Korean war, only three have exceeded \$50 million, each of which was specifically authorized by Congress.”).

⁴³ Mot. of the Debtors for Entry of an Order Authorizing the Debtors to Reject Certain Lease Agreements at 10, *In re FirstEnergy Solutions Corp., et al.*, No. 18-50757 (Bankr. N. D. Ohio Apr. 1, 2018) (explaining that, even before the recent fire, the Mansfield Plant was expected to have a cash flow shortfall of \$104 million in 2018).

defined as the occurrence or imminent danger of cyberattacks, electromagnetic pulse attacks, geomagnetic storms, and direct physical attacks that would have significant adverse effects on the reliability of critical electric infrastructure.

The retirement of coal and nuclear plants would not, of course, fit within any of these categories. Nevertheless, some have suggested the Administration use Section 215A on the idea that the potential for a successful cyberattack on natural gas operations makes the electric grid vulnerable due to its reliance on natural gas. As we explain below, Section 215A is not available to address cyber-intrusions into the natural gas supply chain and, in any case, would not support long-term cost of service rate recovery for coal and nuclear plants. But, even if the statute were available for this purpose, the potential for a successful cyber-attack on the natural gas supply chain could not credibly form the basis of any emergency finding any more than speculation of potential cyber-attacks on any other supply resource or energy-related operations. The natural gas industry takes cybersecurity seriously, and continues to be proactive in taking the necessary precautions to protect its operations. Moreover, there is no evidence to conclude that an attack would cause widespread loss of operational capability.

The physical operations of natural gas production, transmission, and distribution make the system inherently reliable and resilient. Disruptions to natural gas service are rare. When they do happen, a disruption of the system does not necessarily result in an interruption of scheduled deliveries of natural gas supply because the natural gas system has many ways of offsetting the impact of disruptions. As noted in a report from MIT:

The natural gas network has few single points of failure that can lead to a system-wide propagating failure. There are a large number of wells, storage is relatively widespread, the transmission system can continue to operate at high pressure even with the failure of half of the compressors, and the distribution network can run unattended and without power. This is in contrast to the electricity grid, which has, by comparison, few generating points, requires oversight to balance load and demand on a tight timescale, and has a transmission and distribution network that is vulnerable to single point, cascading failures.⁴⁴

Moreover, Section 215A does not empower the Department to take action in response to cyberattacks directed outside the electric system. Section 215A defines “grid security emergency” to include cyberattacks directed at “electronic devices or communications networks” that are “essential to the reliability of critical electric infrastructure.” Critical electric infrastructure is defined as a subset of the “bulk-power system,” which is itself defined in Section 215 to include electric transmission and generation, but not natural gas supply chain infrastructure.

Finally, the relief FirstEnergy sought in its Section 202(c) application, and that the Department proposed in its NOPR to FERC, far exceeds what is available under Section 215A. Once the requisite finding of a “grid security emergency” is made by the President, Section 215A authorizes

⁴⁴ Massachusetts Institute of Technology, Lincoln Laboratory, *Interdependence of the Electricity Generation System and the Natural Gas System and Implications for Energy Security* (May 2013), <https://www.ll.mit.edu/mission/engineering/Publications/TR-1173.pdf>.

the Department to “issue such orders for emergency measures as are necessary in the judgment of the Secretary to protect or restore the reliability of critical electric infrastructure or of defense critical electric infrastructure during such emergency.” Orders providing for “emergency measures” may last only fifteen days before an additional emergency finding is required. The fifteen-day limitation shows clearly that when Congress used the words “emergency measures” it meant them in the ordinary sense that emergency measures are temporary and short-lived. FirstEnergy’s request that certain favored power plants receive rate recovery for four years, or the Department’s NOPR, which was of indefinite duration, would far exceed an authority limited to providing temporary, emergency relief.

V. Conclusion

For the foregoing reasons, the Department must reject FirstEnergy’s petition under Section 202(c) of the Federal Power Act, as well as any other related action under the Defense Production Act, Section 215A of the Federal Power Act or any other authority that provides unwarranted “emergency” relief.

Sincerely,

Advanced Energy Economy

The American Petroleum Institute

The American Wind Energy Association

The Electric Power Supply Association

The Interstate Natural Gas Association of America

The Natural Gas Supply Association



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May 7, 2018

Secretary Rick Perry
U.S. Department of Energy
1000 Independence Ave. SW
Washington, DC 20585
AskOE@hq.doe.gov

Dear Secretary Perry,

Pretty much anyone even tangentially connected to the electric power industry waits with bated breath for DOE's decision on the March 29 request by First Energy Solutions that the Department declare a national emergency under Section 202(c) of the Federal Power Act for *all* nuclear and coal power plants in PJM for a minimum of four years.¹ Such an action would be unprecedented, unjustified under the authorities in the statute, and would cost consumers tens of billions of dollars. That's why Public Citizen joins the diverse protest chorus of other groups that formally oppose First Energy's multi-billion dollar ratepayer bailout request, and, while we're all waiting on this monumental decision, we submit several requests designed to introduce transparency into this process.

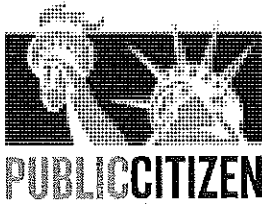
All Submissions and Communications On First Energy's Request Must Be Part of Public Record

Given the enormous implications the DOE's decision will have on consumers, energy markets, the future of electricity policy—and the legal work load of dozens of trade associations, public interest groups and various companies, states and a whole slew of other entities too numerous to name—the DOE must treat this proceeding as it would a public docket, providing a comprehensive public record not only of submissions to DOE regarding First Energy's request, but all communications, records and other material reflecting DOE's information gathering with outside parties and other Federal agencies (including the White House) on the First Energy 202(c) request. First Energy's request is so unprecedented, and the consequences of granting such emergency authority so dire, that the public interest can only be satisfied with a complete and open public docket. Right now, the public is denied access to any comprehensive, official record of comments, submissions and other key documentation that the DOE could use to make a decision on First Energy's unprecedented request.

Our survey of publicly-available submissions to DOE on the First Energy request show unanimity in opposition to granting an emergency under 202(c). For example, on April 5 the PJM Industrial Customer Coalition submitted a formal Protest of First Energy's request², as did

¹ <https://statepowerproject.files.wordpress.com/2018/03/fes-202c-application.pdf>

² http://blogs.edf.org/energyexchange/files/2018/04/Protest-of-PJM-Consumer-Representatives_FES-Emergency-Order-Request-A6290222.pdf



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the American Public Power Association on April 9.³ The American Petroleum Institute (a formidable lobby shop that knows a thing or two about cutting through the flak and going straight to the top decision maker) bypassed DOE entirely in its request to the President of United States to reject First Energy's request.⁴ On April 24, the Advanced Energy Economy submitted comments requesting the Department reject First Energy's request.⁵

Opinions and Communications by and with White House Lawyers As Referenced in the August 4, 2017 Letter from Robert Murray Must Be Made Public As Part of This Proceeding

The inception of First Energy's radical Section 202(c) request appears to originate with Robert Murray, Chairman, President and Chief Executive Officer of Murray Energy Corporation. An infamous memo dated August 4, 2017 signed by Mr. Murray, summarizes a series of meetings and communications the coal magnate had with a variety of Trump Administration officials—including the President of the United States—detailing Murray's efforts a year ago to push the Administration to declare a national emergency for First Energy's failing power plants under 202(c).⁶

It is important to note that *four days* after Mr. Murray authored this letter to the Trump Administration demanding action on declaring an emergency under 202(c), Murray Energy Corporation gave \$1 million to America First Action, Inc., a SuperPAC tied to promoting President Donald Trump and his Administration.⁷ Perhaps the \$1 million helped the President of the United States focus on the letter's contents.

Murray writes in the letter that he “personally” spoke with President Trump at a July 25 rally in Youngstown, Ohio event requesting “that President Trump direct Energy Secretary Rick Perry to invoke Section 202(c) of the Federal Power Act declaring an emergency on the electric power grid.” [at Page 1]. Murray claims President Trump then “turned to Energy Secretary Rick Perry and said three times ‘I want this done’”. [at Page 1]

Murray's letter continues: “It's been 3 weeks since we last talked to you [about declaring an emergency under 202(c)] and there seems to be no resolution and no action . . . Our understanding is that White House lawyers have some concern regarding 202 C . . . While we are trying to reduce the level of concern of White House lawyers—and we think we are having some success, time is a luxury we do not have. We can understand why [White House] lawyers don't want to risk losing . . . Even if we are wrong and this fails, at least we can tell our people

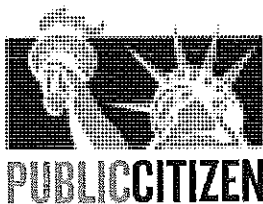
³ www.publicpower.org/periodical/article/association-urges-doe-reject-firstenergy-plea-emergency-order

⁴ www.api.org/~media/Files/News/Letters-Comments/2018/4-13-18-Ltr-to-the-President-Federal-Power-Act-Section-202c.pdf

⁵ www.aee.net/articles/aee-urges-doe-reject-emergency-support-of-coal-nuclear-plants

⁶ www.documentcloud.org/documents/3936141-Murray-s-letters-to-Trump-administration.html

⁷ <http://docquery.fec.gov/cgi-bin/forms/C00637512/1199534/sa/ALL>



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you did everything possible and that you left no stone unturned . . . We need action. DOE must enact 202 C.” [Murray letter, at Page 3]

It is clear that First Energy’s request began not with its March 29, 2018 demand, but rather with Robert Murray’s formal initiative beginning on July 25, 2017. Therefore, records of all communications and meetings described in Robert Murray’s August 4, 2017 letter—including those describing the legal opinions of White House lawyers as described in the letter—must be made public as part of this proceeding.

Communications Regarding the Design, Development and Dissemination of a NETL Report That Was Publically Released 48 Hours Before First Energy’s Request Must Be Made Public As Part of this Record

The First Energy request prominently features a U.S. Department of Energy National Energy Technology Laboratory (NETL) study⁸ that purports to show that “coal was the most resilient form of power generation” during the 13-day cold snap that hit the East Coast beginning December 27, 2017. Although the NETL report is dated March 13, DOE did not publicly release it until March 27 (“The new report, released today...” reads the Office of Fossil Energy web site dated March 27, 2018).⁹

It seems an incredible coincidence that First Energy’s 202(c) request so prominently features a report that was not released to the public 48 hours before First Energy’s request.

But not really. Less than two months before First Energy’s request, Doug Matheney, special adviser to Energy Secretary Rick Perry, told the West Virginia Mining Symposium in Charleston, West Virginia on January 31, 2018 that he’s “here to help” the coal industry; that his “one purpose” for going to serve as Secretary Perry’s top advisor is to help the U.S. coal industry; that the DOE’s job is to give coal “a positive outlook”; and that DOE must “understand the importance of coal to the generation of electricity and to the reliability and resilience of the grid.”¹⁰ I believe Mr. Matheney—after all, prior to his current senior advisor position to Energy Secretary Perry, he ran the National Mining Association’s Count on Coal Initiative in Ohio.¹¹

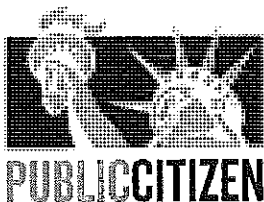
⁸ *Reliability and the Oncoming Wave of Retiring Baseload Units, Volume I: The Critical Role of Thermal Units During Extreme Weather Events*, DOE/NETL-2018/1883, www.netl.doe.gov/research/energy-analysis/search-publications/vuedetails?id=2594

⁹ www.energy.gov/fe/articles/netl-study-highlights-importance-coal-power-generation-during-bomb-cyclone-power-demands

¹⁰ Taylor Kuykendall, Energy department adviser assures US coal industry he's 'here to help', *S&P Market Intelligence*, January 31, 2018,

<https://platform.mi.spglobal.com/web/client?auth=inherit#news/article?id=43381678&cdid=A-43381678-12327>

¹¹ Hannah Northey, “Political hires climb aboard,” *E&E News*, March 8, 2017



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To allay concerns that the DOE is using its Laboratories as advocacy tools for select private interests, all communications and records regarding the design, development and dissemination of the NETL report must be made public as part of this record.

Both First Energy's 202(c) Request And Possible Action Under the 1950 Defense Production Act Must Be Rejected Because No Emergency Exists From The Company's Bankruptcy

The Department's regulations defining an "emergency" for the purposes of 202(c) appear to prohibit its use for the kind of economic issues faced by First Energy's bankruptcy: "Situations where a shortage of electric energy is projected due solely to the failure of parties to agree to terms, conditions or other economic factors relating to service, generally will not be considered as emergencies unless the inability to supply electric service is imminent."¹²

Indeed, PJM's March 30 response to First Energy's request concludes that "PJM can state without reservation there is no immediate threat to system reliability."¹³ And a subsequent May 3 *Generation Deactivation Notification Update* concludes that the retirement of 4,000 MW identified in the First Energy request poses no reliability concern whatsoever.¹⁴ Similar conclusions were reached last year in Public Citizen's congressional testimony¹⁵ and Public Citizen filings in Federal Energy Regulatory Commission Docket No. RM18-1.¹⁶ Indeed, FERC ruled 5-0 in its January 8, 2018 order rejecting the Department of Energy's first attempt to bail out First Energy's uneconomic power plants, concluding that "the extensive comments submitted by the RTOs/ISOs do not point to any past or planned generator retirements that may be a threat to grid resilience."¹⁷

While First Energy has not publicly requested it, rumors are circulating that—given the uphill legal battle that taking action under 202(c) presents—the President will act using the *1950 Defense Production Act*.¹⁸ Bailing out First Energy's power plants (or all nuclear and coal power plants in PJM, as First Energy has requested) utilizing the 1950 DPA is even more dubious than using 202(c). The 1950 DPA authorizes the federal government to inject cash into companies essential for national defense in order to protect domestic supplies of key products.

¹² 10 CFR § 205.371

¹³ At Page 1, <https://docs.house.gov/meetings/IF/IF03/20180412/108114/HHRG-115-IF03-20180412-SD050.pdf>

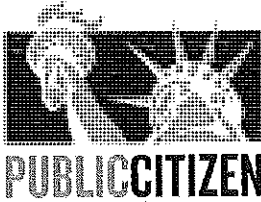
¹⁴ www.pjm.com/-/media/committees-groups/committees/teac/20180503/20180503-teac-generation-deactivation-notification.ashx

¹⁵ www.citizen.org/system/files/case_documents/testimony-tyson-slocum-energy-and-commerce-committee-october-2017_0.pdf

¹⁶ <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14721747>

¹⁷ At 15, <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14793020>

¹⁸ www.fema.gov/media-library-data/20130726-1650-20490-5258/final_defense_production_act_091030.pdf



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But the First Energy bankruptcy presents no energy supply emergency, and the eventual retirement of these power plants pose no threat to supplying energy for national defense, and no national security emergency exists as a result of the First Energy bankruptcy. Past uses of the 1950 DPA include the 2000-01 California Deregulation Crisis¹⁹ (power outages caused by one of the largest corporate market manipulation frauds in history), and more recently in 2012 to provide assistance to the biofuels industry to provide needed fuel supplies for military ships and aircraft. Utilizing the 1950 DPA to bail out failing nuclear and coal power plants would cost consumers and/or taxpayers billions of dollars—an amount far higher than Congress typically allocates for the 1950 DPA. Indeed, the Omnibus spending bill passed earlier this year allocated \$67.4 million for the 1950 DPA.²⁰

Finally, government action isn't needed because the power market has long adjusted to such bankruptcies: bondholders of secured debt on such bankrupt facilities often sell such assets for cheap to plenty of interested buyers. For example, the private equity owner of the National Basketball Association's Detroit Pistons just bought himself an 800 MW natural gas power plant in PJM from NRG's bankrupt GenOn subsidiary²¹. Perhaps First Energy's approach has been all wrong: instead of seeking handouts from consumers and taxpayers, instead owners of uneconomic power plants should be stroking the egos of the proprietors of various professional sports teams as prospective purchasers of generation assets. The power plants could have their own mascots, and maybe even additional revenues could be procured through naming rights.

Respectfully submitted,

Tyson Slocum, Energy Program Director
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Washington, DC 20003
(202) 588-1000
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Cc:

Mr. Bruce Walker, Assistant Secretary
Office of Electric Reliability and Energy Reliability
bruce.walker@hq.doe.gov

Ms. Catherine Jereza, Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
catherine.jereza@hq.doe.gov

¹⁹ www.gpo.gov/fdsys/pkg/CHRG-107shrg76811/html/CHRG-107shrg76811.htm

²⁰ Public Law No. 115-141, www.congress.gov/115/bills/hr1625/BILLS-115hr1625enr.pdf

²¹ FERC Docket No. EC18-70.

From: Admin
To: AskOE
Subject: Letter to President Trump regarding First Energy Solutions
Date: Tuesday, May 08, 2018 4:39:41 PM
Attachments: FINAL AFEC President Letter.pdf

May 8, 2018
President Donald J. Trump
The White House
1600 Pennsylvania Ave.
Washington, D.C. 20500
Dear Mr. President:

As the Alliance for Energy Choice – a grassroots organization dedicated to keeping energy costs low in Ohio – we urge you to reject the unprecedented request from FirstEnergy Solutions (FES) for an emergency order under Section 202(c) of the Federal Power Act. Recent news reports indicate that your Administration may also be looking into possible use of the Defense Production Act and other federal statutes in light of the FES application.

This request is likely a last and desperate attempt by FES to seek a government-funded bailout as they look to escape the consequences of their fiscal mismanagement and poor decision-making.

FES first sought a bailout from Ohio consumers using bill riders, but so far, this attempt at hijacking rates has been held at bay. FES next sought a bailout through a Grid Resilience Pricing Rule but were again thwarted by pro-market ideals, this time from the Federal Energy Regulatory Commission.

Now FES is turning to you and asking the President of The United States to use a wartime power to shield them from competition by shifting financial risk onto consumers.

If this were to be granted, it would not only represent an historic use of a wartime power in a time of peace, but also run contrary to your administration's mission of growing the American economy through competition, increasing our global competitiveness, and modernizing our infrastructure. Any attempt to alter energy markets in this way would result in a significant step backwards in accomplishing these important public-policy goals and undoubtedly increase energy costs for Americans.

Energy competition has been a boon for consumers and businesses, as they continue to enjoy historically low energy rates, while at the same time seeing an increase in

reliability.^{[1], [2]} This energy boom has also created thousands of new, good-paying jobs, providing a boost to the American economy and increasing this country's energy independence. Abundant, low-cost Utica and Marcellus Shale gas that fuels many of our factories and power plants in the Appalachian region would surely suffer as a result of any action taken to subsidize competing plants and fuel sources.

As you are aware, the powers granted to your office by the Defense Production Act of 1950 are vast. They were first derived in the aftermath of the Second World War to ensure adequate domestic production during times of war. By comparing their shrinking profits and falling stock prices to a national crisis on the scale of war, FES asks your office and the powers granted to you under this law to consider their company-specific, self-inflicted financial woes as a national emergency. It would be both unprecedented and unfathomable to use wartime powers to bailout one single company who has not been able to show that their assets are critical to electric grid reliability or national defense. We trust you will see this FES "Hail Mary" attempt at superseding free market competition as harmful to the plights of individual Americans and counter to American economic principles. Please reject this desperate plea and protect energy competition and the free market in the United States.

Thank you for your consideration of our request and we look forward to working with you and your Administration in continuing to pursue our shared vision of providing American businesses and consumers with affordable, reliable, American-made energy.

Sincerely,

The Alliance for Energy Choice

Cc: Honorable James Richard Perry, Secretary of Energy

The Alliance is a non-profit advocacy organization made up of independent power producers and power plant developers. We promote fairness and competition among electric utilities and advocate for market solutions that will ensure an adequate and fairly-priced supply of electric power to Ohio's residents and businesses. Alliance members include: Calpine, Eastern Generation, NRG, Vistra Energy, and The Energy Professionals of Ohio.

[1] "PJM's Evolving Resource Mix and System Reliability." March 30, 2017. Accessed March 14, 2018.

<http://www.pjm.com/~media/library/reports-notice/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx>.

[2] Average Price of Electricity to Ultimate Customers by End-Use Sector, " U.S. Energy Information Administration. February 27, 2018. Accessed March 14, 2018. https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a.

Alliance for Energy Choice

VIA EMAIL

May 8, 2018

President Donald J. Trump
The White House
1600 Pennsylvania Ave.
Washington, D.C. 20500

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² Average Price of Electricity to Ultimate Customers by End-Use Sector, " U.S. Energy Information Administration. February 27, 2018. Accessed March 14, 2018.

https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a.

Marcellus Shale gas that fuels many of our factories and power plants in the Appalachian region would surely suffer as a result of any action taken to subsidize competing plants and fuel sources.

As you are aware, the powers granted to your office by the Defense Production Act of 1950 are vast. They were first derived in the aftermath of the Second World War to ensure adequate domestic production during times of war. By comparing their shrinking profits and falling stock prices to a national crisis on the scale of war, FES asks your office and the powers granted to you under this law to consider their company-specific, self-inflicted financial woes as a national emergency. It would be both unprecedented and unfathomable to use wartime powers to bailout one single company who has not been able to show that their assets are critical to electric grid reliability or national defense. We trust you will see this FES "Hail Mary" attempt at superseding free market competition as harmful to the plights of individual Americans and counter to American economic principles. Please reject this desperate plea and protect energy competition and the free market in the United States.

Thank you for your consideration of our request and we look forward to working with you and your Administration in continuing to pursue our shared vision of providing American businesses and consumers with affordable, reliable, American-made energy.

Sincerely,

The Alliance for Energy Choice

Cc: Honorable James Richard Perry, Secretary of Energy

The Alliance is a non-profit advocacy organization made up of independent power producers and power plant developers. We promote fairness and competition among electric utilities and advocate for market solutions that will ensure an adequate and fairly-priced supply of electric power to Ohio's residents and businesses. Alliance members include: Calpine, Eastern Generation, NRG, Vistra Energy, and The Energy Professionals of Ohio.

From: Herzog, Megan (AGO)
To: [AskOE](#)
Cc: [Tepper, Rebecca \(AGO\)](#); [Courchesne, Christophe \(AGO\)](#)
Subject: Objections to FirstEnergy Solutions Corp.'s Request for Emergency Order Pursuant to Federal Power Act Section 202(c)
Date: Wednesday, May 09, 2018 5:41:35 PM
Attachments: [AGO Comments on DOE_s202\(e\) request \(5.9.2018\).pdf](#)

Dear Secretary Perry:

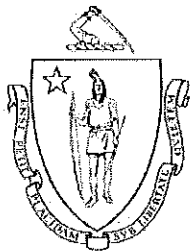
Attached please find a letter to you from the Attorneys General of Massachusetts et al. regarding objections to FirstEnergy Solutions Corp.'s request for an emergency order pursuant to Federal Power Act section 202(c).

Please do not hesitate to contact me with any questions or concerns regarding this submission.

Thank you,

Megan M. Herzog

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May 9, 2018

Via Electronic Mail: AskOE@hq.doe.gov

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue SW
Washington, DC 20585

Re: Objections to FirstEnergy Solutions Corp.'s Request for Emergency Order Pursuant to Federal Power Act Section 202(c)

Dear Secretary Perry:

The Attorneys General of Massachusetts, Connecticut, Illinois, Maryland, North Carolina, Oregon, Rhode Island, Virginia, Washington, and the District of Columbia submit these objections to the request dated March 29, 2018 by FirstEnergy Solutions Corp. and its subsidiaries (collectively "FirstEnergy") to the Secretary of Energy ("Secretary") for an emergency order under section 202(c) of the Federal Power Act, 16 U.S.C. § 824a(c) ("section 202(c)") (the "Request").¹ Specifically, the Request asks you to: i) find an emergency exists in the control area of the PJM Interconnection, L.L.C. ("PJM") due to an alleged "system resiliency" risk, ii) order certain merchant nuclear and coal-fired generators with on-site fuel supply to enter into multi-year contracts with PJM, and iii) order PJM to pay those generators at above-market rates that provide for "full recovery of all costs necessary to ensure continued operations."²

The undersigned Attorneys General have a significant interest in protecting public health and welfare and electric customers from the pollution, increased costs, and other harms associated with subsidizing uneconomic coal-fired and nuclear generators at above-market rates. Abusing section 202(c) in the manner requested by FirstEnergy would set a dangerous precedent that threatens all of our states, including those located outside of PJM's service territory.

The Request is legally flawed, and you should unequivocally deny it. Because

¹ See Letter from Rick C. Giannantonio, General Counsel, FirstEnergy Solutions Corp. et al., to James Richard Perry, Sec'y of Energy, U.S. Dep't of Energy [DOE] (Mar. 29, 2018) [hereinafter Request].

² *Id.* at 1, 31.

FirstEnergy fails to identify any “emergency,” the requested section 202(c) order would be unlawful and *ultra vires*. Furthermore, the requested order would undermine competitive regional power markets, burden customers with excessive costs, undercut state energy laws and policies, and exacerbate pollution and public health harms.

I. FirstEnergy’s Declining Profits and Generalized Market Grievances Do Not Constitute an “Emergency.”

Issuing a section 202(c) order to address the declining economics of certain generators would be a grave abuse of the Federal Power Act. Section 202(c) explicitly authorizes the Secretary to issue temporary orders only in wartime or other “emergency” situations resulting from “sudden” electricity demand spikes or supply shortages.³ The “sudden” “emergenc[ies]” contemplated in section 202(c) do not include inefficient generators’ failure to turn a profit or their orderly displacement by other resources—a natural consequence of competitive markets.

Though the Federal Power Act does not define the terms “emergency” or “sudden,” the plain meaning of these terms indicates that Congress intended section 202(c) authority to be invoked rarely, in response to acute events that demand immediate response. As the D.C. Circuit Court of Appeals has recognized, the text dictates that circumstances triggering a section 202(c) order are specific, unexpected, urgent, and temporary.⁴

The Department of Energy’s (“Department”) interpreting regulations and historical use of section 202(c) authority accord with the text’s plain meaning. The Department defines an “emergency” as, *inter alia*, an “unexpected” supply shortage, which “may be the result of weather conditions, acts of God, or unforeseen occurrences not reasonably within the power of the affected ‘entity’ to prevent.”⁵ The Department’s regulations further state that section 202(c) orders “are envisioned as meeting a *specific* inadequate power supply situation.”⁶ Accordingly, the Department has rarely exercised its section 202(c) authority. Past emergency orders typically have responded to acute crises such as blackouts or severe storms.⁷

The Request fails to show that any specific, unexpected, or urgent supply threat exists in PJM. The Request instead relies primarily on general predictions that some aging U.S. coal-fired and nuclear generators will retire over the next decade. The Request specifically identifies three

³ 16 U.S.C. § 824a(c)(1).

⁴ See *Richmond Power & Light v. FERC*, 574 F.2d 610, 615 (D.C. Cir. 1978) (stating that section 202(c) “speaks of ‘temporary’ emergencies, epitomized by wartime disturbances, and is aimed at situations in which demand for electricity exceeds supply”). See also *Fed. Power Comm’n v. Fla. Power & Light Co.*, 404 U.S. 453 n.1 (1972) (relating section 202(c) to “the exigencies of ‘war’”); *Duke Power Co. v. Fed. Power Comm’n*, 401 F.2d 930, 944 (D.C. Cir. 1968) (stating that section 202(c) “relate[s] exclusively to temporary interconnections during national emergencies”).

⁵ 10 C.F.R. § 205.371 (other examples may include a “sudden” demand spike, a fuel shortage, “regulatory action” prohibiting the use of certain generators, or “[e]xtended periods of insufficient . . . supply” due to planning failures).

⁶ *Id.* (emphasis added).

⁷ See, e.g., *DOE’s Use of Federal Power Act Emergency Authority*, DOE, <https://www.energy.gov/oe/services/electricity-policy-coordination-and-implementation/other-regulatory-efforts/does-use>.

PJM nuclear assets that are scheduled (but not certain) to retire several years from now, in 2020–2021. The Request also cites FirstEnergy’s long-anticipated bankruptcy filings and its general frustration with the fact that competitors are outperforming its generators in PJM markets.⁸ Long-term trends, possible future retirements, and FirstEnergy’s dissatisfaction with its declining profits do not constitute a “sudden” “emergency” within the meaning of section 202(c). Retirements of uncompetitive coal-fired and nuclear generators are the result of economics, the natural evolution of technology, and shifts in policy.⁹ Such trends are natural in a competitive market, and are far from the wartime disturbances or other unforeseen events contemplated in section 202(c).¹⁰ The Secretary’s use of section 202(c) authority to interfere with the operation of competitive electricity markets in order to privilege certain fuels or suppliers would represent a dramatic expansion of the Secretary’s emergency authority.¹¹

II. Impending and Uncertain Generator Retirements Pose No Immediate Threat.

As the Federal Energy Regulatory Commission (“Commission”) and PJM have confirmed, impending coal-fired and nuclear generator retirements pose no emergency threat to power supply in PJM or elsewhere.¹² PJM’s performance during recent extreme winter weather affirms this.¹³

The Request relies heavily on a single National Energy Technology Laboratory study (“NETL Study”) concluding that demand in PJM during the December 2017–January 2018 cold snap (the “Cold Snap”) “could not have been met without coal.”¹⁴ But the NETL Study’s analysis has critical defects. It mistakenly concludes that coal-fired generation was critical to reliability because coal-fired generation disproportionately increased during the Cold Snap. Actually, this increase was due to the fact that more expensive and less efficient plants, such as the coal-fired plants identified in the study, are only dispatched when demand is high—not due to any attributes particular to coal-fired generation.¹⁵ The NETL Study’s conclusion fails to

⁸ See Request at 7–8, 13, 20–22.

⁹ JUDY CHANG ET AL., BRATTLE GROUP, ADVANCING PAST “BASELOAD” TO A FLEXIBLE GRID 8–13 (2017), available at <https://tinyurl.com/y7wwalwt>.

¹⁰ See PAUL HIBBARD ET AL., ANALYSIS GROUP, ELECTRICITY MARKETS, RELIABILITY AND THE EVOLVING U.S. POWER SYSTEM 4–5 (2017), available at <https://tinyurl.com/ybx9psbf> (“The retirement of aging resources is a natural element of efficient and competitive market forces, and where markets are performing well, . . . mainly represent[s] the efficient exit of uncompetitive assets, resulting in long-run consumer benefits.”).

¹¹ See *Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2444 (2014) (agency’s statutory interpretation is unreasonable where “it would bring about an enormous and transformative expansion in [the agency’s] regulatory authority without clear congressional authorization”).

¹² See generally *Grid Reliability and Resilience Pricing*, 162 FERC ¶ 61,012 (2018); Letter from Vincent P. Duane, PJM, to James Richard Perry, Sec’y of Energy (Mar. 30, 2018), available at <https://tinyurl.com/PJMletter> [hereinafter PJM Comments]. Accord DOE, STAFF REPORT TO THE SECRETARY ON ELECTRICITY MARKETS AND RELIABILITY 63, 100 (2017).

¹³ See *infra* text accompanying notes 18–19.

¹⁴ See NAT’L ENERGY TECH. LAB., RELIABILITY, RESILIENCE AND THE ONCOMING WAVE OF RETIRING BASELOAD UNITS, VOL. I: THE CRITICAL ROLE OF THERMAL UNITS DURING EXTREME WEATHER EVENTS 17 (2018).

¹⁵ See ALISON SILVERSTEIN, ROB GRAMLICH, & MICHAEL GOGGIN, GRID STRATEGIES LLC, A CUSTOMER-FOCUSED

account for a key fact: that certain resources were dispatched is not evidence the system lacked (or will lack during future events) other resources that could have been called upon instead to meet market demand and maintain reliability.

The Request cites the defective NETL Study as evidence that a whole category of coal-fired and nuclear generators should be subsidized by electric customers at above-market rates for a multi-year period (or perhaps indefinitely).¹⁶ FirstEnergy's depiction of system performance and needs is deeply flawed. The system's preparedness for, and relatively modest price spikes during, the Cold Snap reflect significant actions PJM and other Northeast and Mid-Atlantic grid operators have taken to improve winter reliability since the 2014 Polar Vortex.¹⁷ PJM has more than enough capacity to meet demand, even in extreme weather.¹⁸ Notably, coal-fired and nuclear generators were not immune from outages during the Cold Snap, while other resources such as hydro, wind, and natural gas played vital roles in maintaining reliability.¹⁹ There is no evidence that a system with fewer coal-fired and nuclear generators, following such generators' orderly exit from the markets, would perform worse during future extreme weather events.²⁰

The Request claims, without support, that “[u]nless immediate action is taken,” PJM is “likely” to experience “load-shedding (or worse).”²¹ Yet, PJM recently sent a letter to the Secretary “stat[ing] without reservation there is no immediate threat to system reliability” should the FirstEnergy units retire as announced, and further, should PJM identify any reliability issues, it has “a range of tools available . . . to induce assets to remain temporarily on-line.”²² Per its standard, Commission-approved procedures, PJM responded to FirstEnergy's announced retirements by analyzing system reliability. PJM concluded that impending generator

FRAMEWORK FOR ELECTRIC SYSTEM RESILIENCE 7 (2018), available at <https://tinyurl.com/y9b4347t> (“No single unit or type of generation is critical or resilient in itself. . . . There is no evident need to compensate generators or other assets for bulk power system resilience beyond the engineering-based reliability services already being procured.”).

¹⁶ See Request at 4–9, 32.

¹⁷ See, e.g., *January's Cold Weather Affects Electricity Generation Mix in Northeast, Mid-Atlantic, U.S.* ENERGY INFORMATION ADMIN. (Jan. 23, 2018), <https://www.eia.gov/todayinenergy/detail.php?id=34632>.

¹⁸ See *Update: PJM System Performing in Winter Storm Grayson*, PJM INSIDE LINES (Jan. 4, 2018), <https://tinyurl.com/yangm9wj> (“During the cold weather, PJM has had adequate power supplies and maintained operating reserve margins. There have been no concerns with fuel availability.”).

¹⁹ See PJM INTERCONNECTION, PJM COLD SNAP PERFORMANCE DEC. 28, 2017 TO JAN. 7, 2018 13–21 (2018), available at <https://tinyurl.com/ycetjvag>; *Update 2 – Entergy Shuts Massachusetts Pilgrim Nuclear Plant During Blizzard*, REUTERS, Jan. 4, 2018, <https://tinyurl.com/y7smj9b3> (reporting that ISO New England's system performed well during the Cold Snap even with very little coal-fired generation and despite shutdown of the 688-megawatt Pilgrim nuclear power plant due to downed power lines).

²⁰ Cf. *Grid Reliability and Resilience Pricing*, 162 FERC ¶ 61,012 (2018) (Glick, C., concurring) (stating there was “no evidence in the record to suggest that temporarily delaying the retirement of uncompetitive coal and nuclear generators would meaningfully improve the resilience of the grid”).

²¹ Request at 9. See also *id.* at 27.

²² See PJM Comments at 1.

retirements pose no immediate threat.²³ In sum, there is no indication, in the Request or otherwise, that Secretarial action is necessary or appropriate at this time.²⁴

III. The Requested Order Would Increase Prices and Pollution and Undermine State Energy Policies, With No Clear Reliability Benefits.

FirstEnergy's requested order would impose substantial, unreasonable costs on electric customers and the public, with no demonstrable system benefits. The Request provides no assessment of customer costs or the value of the so-called "fuel security and diversity" benefits of coal-fired and nuclear generators.²⁵ As outlined in separate comments submitted to the Commission by certain of the undersigned Attorneys General together with state agencies and consumer advocates (attached hereto as *Exhibit A*), subsidizing uneconomic generators at above-market rates would raise prices and force customers to bear the very economic risks that wholesale markets were designed to avoid. Furthermore, the requested section 202(c) order would undermine state policies to protect public health and ratepayers, including choices to promote renewable and alternative energy generation. Prolonging the operation of uncompetitive coal-fired power plants that would otherwise be replaced by cleaner resources would harm air quality and threaten progress toward our states' climate and clean energy goals.²⁶

* * * *

In general, the undersigned Attorneys General vehemently oppose extraordinary federal measures in response to FirstEnergy's Request or other section 202(c) applications, or action under the Defense Production Act.²⁷

For all of the foregoing reasons, the undersigned Attorneys General respectfully urge the Secretary to **DENY** FirstEnergy's legally flawed Request.

Please do not hesitate to contact us should you wish to engage us further in this matter.

²³ See Transmission Expansion Advisory Comm., PJM, Generation Deactivation Notification Update (May 3, 2018), available at <https://tinyurl.com/y7pjk9j>.

²⁴ Furthermore, the requested order could conflict with action already underway in Commission Docket No. AD18-7, which the Commission initiated to evaluate the so-called resilience of the bulk power system. See *Grid Resilience in Regional Transmission Organizations and Independent System Operators*, 162 FERC ¶ 61,012 (2018).

²⁵ See Request at I.

²⁶ See Initial Comments of the Attorneys General of Massachusetts et al., FERC Docket No. RM18-1, at 43–52 (Oct. 23, 2017) (attached hereto as Exhibit A).

²⁷ See Letter from Senator Joe Manchin III to President Donald J. Trump (Apr. 18, 2018), available at <https://tinyurl.com/y7mdmjgx> ("urg[ing] [the Trump] Administration to consider using . . . the Defense Production Act of 1950 to prevent the impending retirement of numerous coal-fired and nuclear power plants").

Sincerely,

MAURA HEALEY
ATTORNEY GENERAL OF
MASSACHUSETTS

/s/ Rebecca Tepper

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Exhibit A:

**Initial Comments of the Attorneys General of Massachusetts et al.,
Federal Energy Regulatory Commission Docket No. RM18-1
(Oct. 23, 2017)**

**UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION**

**Grid Reliability and Resilience
Pricing**

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Docket No. RM18-1-000

**INITIAL COMMENTS OF THE ATTORNEYS GENERAL OF MASSACHUSETTS,
CALIFORNIA, CONNECTICUT, ILLINOIS, MARYLAND, NORTH CAROLINA,
OREGON, RHODE ISLAND, VERMONT, AND WASHINGTON, CONNECTICUT
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, RHODE
ISLAND DIVISION OF PUBLIC UTILITIES AND CARRIERS, AND
NEW HAMPSHIRE OFFICE OF THE CONSUMER ADVOCATE**

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The undersigned Attorneys General, state agencies, and state consumer advocates (the “State Commenters”) hereby submit these initial comments in response to the Federal Energy Regulatory Commission’s (the “Commission”) Notice, dated October 2, 2017, inviting comments on a proposed rule regarding “grid reliability and resilience pricing,” which was released by the Department of Energy (“DOE”) on September 29, 2017 and published in the Federal Register on October 10, 2017. 82 Fed. Reg. 46,940 (the “Proposal”).¹

The Proposal is unsupported by law, lacks any reasoned basis or grounding in any supporting factual record, contains no analysis of its costs, and would damage the country’s competitive power markets in a manner likely to impose unreasonable and unnecessary costs on electric customers and profoundly undermine state energy laws and policies. On behalf of our states and our residents, the State Commenters urge the Commission not to finalize the Proposal.²

SUMMARY

DOE asks the Commission to establish a new regulatory regime that requires electric customers to pay certain uneconomic generating resources their full cost of service, under new tariffs administered by the operators of the nation’s otherwise competitive wholesale markets. DOE asserts this is necessary to ensure system “resiliency,” a term that lacks any accepted or legal definition. Without providing *any* estimate of what the Proposal would cost electric customers, DOE urges the Commission to implement the Proposal before this coming winter, to

¹ On October 4, 2017, staff for the Commission issued a request seeking responses during the comment process to thirty questions about the Proposal.

² The State Commenters recognize the numerous state consumer advocates and state public utility commissions that are submitting complementary comments on behalf of ratepayers and other important constituencies.

avoid further retirements of coal and nuclear power plants that allegedly would retire without these payments.

DOE proposes these sweeping changes, but provides the Commission with no lawful basis to adopt the new tariff requirements. DOE does not analyze how its Proposal would affect the wholesale electricity markets, provides no assessment of the Proposal's costs, makes no attempt to define or quantify the Proposal's benefits, and provides no support for making such a dramatic change on an expedited basis. DOE fails to show (or even argue) that the current regulatory construct is unjust and unreasonable, a finding the Federal Power Act requires for the Commission to take the proposed action.

The State Commenters oppose the Proposal for several reasons, which are explained in the detailed comments below:

- The Proposal violates federal law by failing to incorporate a finding of unjust and unreasonable rates under section 206 of the Federal Power Act or to provide an assessment of the resulting costs, as is required for Commission action of this kind. *See pp. 3-7.*
- The Proposal violates the Administrative Procedure Act in two separate ways: (1) by failing to provide the public with adequate notice or reasonable time for meaningful input and (2) by failing to explain or provide record support for its drastic regulatory changes, which are inconsistent with the Commission's long-standing commitment to competitive wholesale electric markets as an essential mechanism under the Federal Power Act to ensure just and reasonable rates, as well as with its efforts to refine those markets through responsive and inclusive

processes in conjunction with Regional Transmission Organizations (“RTOs”) and their stakeholders. *See* pp. 7-20.

- The Proposal’s underlying assumption—that electric system reliability or “resilience” is in danger because aging, uneconomic resources are retiring—is wrong. Under the Commission’s leadership, the bulk power system is reliable today and will continue to be so in the future. Both DOE’s own recent Staff Report and other independent analyses confirm that the risks that supposedly justify the Proposal are manageable and do not justify emergency action favoring particular fuels, but rather counsel for study of continued development of fuel-neutral solutions. Moreover, as independent analyses and state experience show, there is no evidence supporting the conclusion that retirement of aging resources or fuel supply issues are jeopardizing electric system reliability, and, to the contrary, clean energy resources and new technologies, coupled with market mechanisms, can serve future needs. *See* pp. 20-43.
- Last, the Proposal will pose unnecessary and unacceptable risks of harm to the States and their residents. The Proposal would drive up ratepayer costs; thwart state energy policies that support competition, innovation, and reduced air pollution; and impede state progress in addressing the risks of climate change. *See* pp. 43-52.

DETAILED COMMENTS

I. Finalizing the Proposal Would Violate the Federal Power Act.

The Federal Power Act requires that “[a]ll rates and charges . . . by any public utility for or in connection with the transmission or sale of electric energy . . . and all rules and regulations

affecting or pertaining to such rates or charges” must be “just and reasonable” and not “undu[ly] preferen[tial].” 16 U.S.C. § 824d(a), (b).³ Where, as here, the Commission is considering imposing new tariff requirements on public utilities, the Commission must invoke section 206 and prove that existing rates are “unjust, unreasonable, unduly discriminatory or preferential,” and then “determine the just and reasonable rate.” 16 U.S.C. § 824e(a); *see* 16 U.S.C. § 824e(b); *Advanced Energy Mgmt. Alliance v. FERC*, 860 F.3d 656, 662–63 (D.C. Cir. 2017) (under section 206, Commission has “burden to prove the reasonableness of its change” in affirming Commission’s section 206 finding in *PJM Interconnection, LLC*, 151 FERC ¶ 61,208, *order on reh’g*, 155 FERC ¶ 61,157 (2016) (internal quotation omitted)). As the D.C. Circuit has ruled, the Commission “may unilaterally impose a new rate scheme on a utility or Regional Transmission Organization only under [section 206],” *NRG Power Mktg., LLC v. FERC*, 862 F.3d 108, 114 n.2 (D.C. Cir. 2017), and “it will ordinarily be an abuse of the Commission’s discretion not to make the . . . finding [that existing rates are unjust or unreasonable under section 206] explicit.” *Papago Tribal Util. Auth. v. FERC*, 723 F.2d 950, 958 (D.C. Cir. 1983) (Scalia, J.); *see also Maine v. FERC*, 854 F.3d 9, 24-25 (D.C. Cir. 2017) (discussing the Commission’s burden under section 206).

The Proposal wholly fails to meet the section 206 standard for Commission action. Most glaringly, it does not articulate any finding that wholesale rates are now unjust, unreasonable, or unduly discriminatory or preferential. Instead it confirms that rates are, consistent with recent

³ The Proposal states that the Commission’s authority to adopt the proposed regulations arises from sections 205 and 206 of the Federal Power Act, 16 U.S.C. §§ 824d, 824e. Proposal at 46,941. Section 205, however, applies to Commission evaluation of rate filings by public utilities, such as market rule changes proposed in the first instance by RTOs, and the Commission plays “an essentially passive and reactive role” in making decisions under that section. *NRG Power Mktg., LLC v. FERC*, 862 F.3d 108, 115 (D.C. Cir. 2017) (quoting *City of Winnfield v. FERC*, 744 F.2d 871, 875-76 (D.C. Cir. 1984)).

Commission determinations on RTO market rules, currently just and reasonable. Proposal at 46,946 (“implementation of these reforms is important to ensure rates *remain* just and reasonable” (emphasis added)). As a matter of law, therefore, in light of the Proposal’s recognition that rates currently are just and reasonable, the Commission may not impose any new tariff requirements, since it cannot satisfy its section 206 burden.

In place of a section 206 finding, the Proposal rests on allegations of supposed “threats to grid reliability and resilience” from the “continued loss of fuel-secure generation [resources],” which the Proposal says are “necessary to maintain the resiliency of the electric grid.” Proposal at 46,945. Yet the term “resilience” and its sister terms “resiliency” and “fuel secur[ity]” have no clear definition in the Proposal or in law. *See infra* note 8. And even the term “reliability” provides no stand-alone support for taking action because, “when [the Commission] chooses to refer to non-cost factors in rate setting [under the Federal Power Act], it must . . . offer a reasoned explanation of how the [relevant] factor[s] justif[y] the resulting rates.” *TransCanada Power Mktg. Ltd. v. FERC*, 811 F.3d 1, 13 (D.C. Cir. 2015) (quoting *Farmers Union Cent. Exch., Inc. v. FERC*, 734 F.2d 1486, 1502 (D.C. Cir. 1984)).⁴ Because the Proposal fails to set forth any specific section 206 findings demonstrating why current wholesale rates are unjust and unreasonable as they relate to electric grid reliability and “resilience,” the Proposal does not satisfy the requirements of the Federal Power Act and should be rejected on that basis.

Likewise, the very purpose of the Proposal is to impose additional costs on RTOs and the load they serve, yet it makes *no* attempt to address, analyze, characterize, or quantify those

⁴ *See also PJM Interconnection*, 155 FERC ¶ 61,157, 2016 WL 2752930, at *94 (Chairman Bay, dissenting) (“talismanic invocation of reliability is, by itself, inadequate to establish reasoned decision making and just and reasonable rates”).

costs.⁵ Without that information, the Commission cannot make an informed decision that rates resulting from the Proposal will be just and reasonable, as the Federal Power Act requires. *See, e.g., TransCanada Power Mktg.*, 811 F.3d at 11 (without information about portion of reliability program’s costs attributable to profits and risk premiums, Commission “could not properly assess whether the Program’s rates were just and reasonable”); *cf. Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015) (“Consideration of cost reflects the understanding that reasonable regulation ordinarily requires paying attention to the advantages *and* the disadvantages of agency decisions.”).

Not only does the Proposal fail to provide any lawful basis for imposing new tariffs, it also appears to be inconsistent with the requirements of other Federal Power Act standards. Because the Proposal presents the potential for favored resources to receive the windfall of “full” cost-of-service treatment for energy, capacity, and ancillary services that the markets could procure at a lower cost, the Proposal could result in “excessive prices” to the detriment of consumers, in violation of the “just and reasonable” standard and the purposes of the Federal Power Act. *FERC v. Elec. Power Supply Ass’n*, 136 S. Ct. 760, 781 (2016) (“The statute aims to protect ‘against excessive prices’” (quoting *Penn. Water & Power Co. v. FPC*, 343 U.S. 414, 418 (1952).)); *TransCanada Power Mktg.*, 811 F.3d at 12 (statute forbids “excessive profits”); *Pub. Sys. v. FERC*, 606 F.2d 973, 979 n.27 (D.C. Cir. 1979) (Federal Power Act “aim[s] to protect consumers from exorbitant prices and unfair business practices,” as reflected in “statutory

⁵ In recent Congressional testimony, Secretary Perry failed to respond to the question whether DOE analyzed the costs of the Proposal and stated that “[T]he cost effective argument on this is secondary to whether the lights are going to come on I think you take costs into account, but what’s the cost of freedom? . . . What is the cost to build a system to keep America free?” Gavin Bade, *Perry on DOE NOPR pricetag: ‘What’s the cost of freedom?’*, Utility Dive (Oct. 12, 2017), at <http://www.utilitydive.com/news/perry-on-doe-nopr-pricetag-whats-the-cost-of-freedom/507174/>.

requirement that rates be just, reasonable, and nondiscriminatory”). In addition, the Proposal would violate the Federal Power Act to the extent that it would have FERC unduly discriminate in wholesale ratemaking by arbitrarily favoring coal and nuclear power plants over other resources that could provide similar or superior system services or attributes at a lower cost. *See, e.g., Elec. Consumers Res. Council v. FERC*, 747 F.2d 1511, 1515 (D.C. Cir. 1984) (rates must “be non-discriminatory and non-preferential[,] as well as just and reasonable”).

II. The Proposal Violates the Commission’s Legal Rulemaking Obligations.

The Proposal is not lawful rulemaking. In both its content and in the expedited comment process the Commission is following to consider it, the Proposal is not designed to provide the “reasoned decision-making” required in the Federal Power Act context. The Proposal reflects no effort to gather a record of material facts, and therefore the Commission is compromised in its duty to “weigh[] competing views, select[] a compensation formula with adequate support in the record, and intelligibly explain[] the reasons for making [its] choice.” *Elec. Power Supply Ass’n*, 136 S. Ct. 784; *see also Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (agency must “articulate a satisfactory explanation for its action[,] including a ‘rational connection between the facts found and the choice made’” (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962))).

The Proposal lacks the substantive content or supporting factual record that would permit informed and responsive comments from the public. Moreover, the short period afforded for public comment on a regulatory change of such significant consequence as the Proposal allows insufficient time meaningfully to respond to Commission staff’s voluminous questions.⁶ More

⁶ A recent Commission rulemaking on a much narrower topic provided a combined 141 days for comments from the publication of three requests for comments in the Federal Register, with additional days between issuance of the Commission requests and Federal Register publication.

fundamentally, the Proposal does not recognize or explain the profound changes its proposed tariff requirements would make in the Commission's approach to establishing just and reasonable rates, regulating the wholesale electric market, or the potentially significant impact on consumers. For these reasons, the Proposal should go no further.

A. The Proposal Lacks a Factual and Evidentiary Basis, and Adopting It Would Therefore Be Arbitrary and Capricious.

A threshold problem with the Proposal is that it has virtually no supporting factual record of its own. The Proposal is accompanied on the docket by a letter from DOE Secretary Rick Perry, a list of questions from Commission staff, and no other supporting information. While the preamble collects a variety of excerpts from official and other technical reports and from past and ongoing Commission proceedings, none of those references supports the statements in the preamble that allege the Proposal is necessary. In particular, there is no evidentiary support in the references for the Proposal's central premise: that the "premature" retirement of certain "fuel-secure" power plants, coupled with other generators' lack of a 90-day fuel supply, is harming electric system reliability or "resilience" and threatening national security. In fact, existing evidence contradicts this assumption, as discussed in more detail in Sections III through V below.

Although the Proposal purports to rely on the "extensive record" that the Commission and other agencies have developed on the subject matter, Proposal at 46,941, it includes no direct

See Essential Reliability Servs. & the Evolving Bulk-Power Sys. – Primary Frequency Response, Notice of Inquiry, 154 FERC ¶ 61,117 (Feb. 18, 2016) (60 days from Federal Register publication to provide comments, including responses to Commission questions); Notice of Proposed Rulemaking, 157 FERC ¶ 61,122 (Nov. 17, 2016) (60 days from Federal Register publication); Notice of Request for Supplemental Comments, 160 FERC ¶ 61,011 (Aug. 18, 2017) (21 days from Federal Register publication); *see also Winter 2013-2014 Operations & Mkt. Performance in Reg'l Transmission Orgs. & Indep. Sys. Operators*, 149 FERC ¶ 61,145 (Nov. 20, 2014) (90 days for RTO responses to questions).

explanation of what evidence in that record supports the need for the Proposal. For example, the Proposal quotes DOE's January 2017 Quadrennial Energy Review ("January 2017 QER")⁷, including an italicized statement that "the increased importance of system resilience to overall grid reliability *may* require adjustments to market mechanisms that enable better valuation." Proposal at 46,943 (emphasis added). This general statement does not reference any emergency, crisis, or actual need to make significant market changes, nor does it identify fuel security as a key element of "resilience."⁸ The January 2017 QER includes extensive recommendations to address electric system resilience, none of which includes establishing cost-of-service rates for the resources identified in the Proposal. *See, e.g.*, January 2017 QER at 4-1 to 4-55 (no mention of "fuel security").

The Proposal then quotes a May 2017 letter to DOE from the North American Electric Reliability Corporation ("NERC") stating that the changing operating characteristics of the bulk power system "must be well understood and properly managed." That letter does not appear in this rulemaking docket, but is available online.⁹ While the NERC letter identifies retirement of certain generating assets as implicating reliability, it *does not* recommend assuring cost recovery for the resources identified in the Proposal. Instead, the letter requests that the Commission and states conduct a *review* of the economic and policy issues related to retirements. The Proposal

⁷ U.S. Department of Energy, Quadrennial Energy Review – Transforming the Nation's Electricity System: The Second Installment of the QER (Jan. 2017), *available at* <https://energy.gov/sites/prod/files/2017/02/f34/Quadrennial%20Energy%20Review--Second%20Installment%20%28Full%20Report%29.pdf> ("January 2017 QER").

⁸ The January 2017 QER states that "[t]here are no commonly used metrics for measuring grid resilience." January 2017 QER at S-13. In other words, there currently is no quantifiable standard by which to determine either the qualities or the services that will be rewarded under the Proposal by full cost-of-service rates for the Proposal's favored resources.

⁹ *At* https://www.eenews.net/assets/2017/10/03/document_ew_01.pdf.

then makes similar unfounded analytical leaps from DOE's own August 2017 Staff Report¹⁰ to the conclusion that there is a "resiliency" emergency, which will be addressed in more detail below.

Finally, the Proposal includes a description of various Commission proceedings concerning reliability and price formation in wholesale markets dating to 2013. Despite this long record of Commission action, including various orders to strengthen the markets and set "just and reasonable" rates for RTOs and other market participants, the Proposal nonetheless concludes that the very reliability-related market issues the Commission has been addressing in the cited dockets are not being addressed adequately. Without citation or authority, the Proposal states that certain market deficiencies are "undermining reliability and resiliency," Proposal at 46,944, that "the fundamental challenge of maintaining a resilient electric grid has not been sufficiently addressed by the Commission or the ISOs and RTOs," and the "continued loss of fuel-secure generation must be stopped," Proposal at 46,945. Importantly, this unsupported rationale is contradicted by DOE's own findings as set forth in its August 2017 Staff Report, which concluded that wholesale electric markets "are currently functioning as designed—to ensure reliability and minimize the short term costs of wholesale electricity—despite pressures from flat demand growth, Federal and state policy interventions, and the massive economic shift in the relative economics of natural gas compared to other fuels." DOE Staff Report at 10. Moreover, nowhere in that report does DOE recommend, or even identify as an option,

¹⁰ Department of Energy, Staff Report to the Secretary on Electricity Markets and Reliability (Aug. 2017), *available at* https://energy.gov/sites/prod/files/2017/08/f36/Staff%20Report%20on%20Electricity%20Markets%20and%20Reliability_0.pdf ("DOE Staff Report").

subsidizing the generation identified in the Proposal through a federal guarantee of full cost recovery. *See id.* at 126-27.

The lack of factual support for the Proposal extends to the details of its proposed tariffs, including their applicability solely in regions within a Commission-approved ISO or RTO with a day-ahead market, real-time market, and capacity market,¹¹ its 90-day fuel requirement for eligible resources, and its exclusion of resources subject to cost-of-service regulation by states. *See* Proposal at 46,948. Cost-of-service ratemaking, ordinarily reserved for monopoly services, involves specific accounting rules, including specifying the sources of data, accounting for taxes, the treatment of transaction-related costs, asset retirement, lobbying and advertising expenses, and allocation of costs among jurisdictions and functions.¹² The Proposal contains no discussion of, or support for, the inclusion of any of these specific provisions.

In sum, the preamble to the Proposal and the references that it cites include no factual support for the Proposal in general and lack support for its specific provisions to implement cost-of-service ratemaking. These blatant defects make any effort to finalize the Proposal arbitrary and capricious and thus violate the requirements for Commission decision-making under the Federal Power Act, the Administrative Procedure Act, and governing case law. *See Elec. Power Supply Ass'n*, 136 S. Ct. at 784; *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43.

¹¹ The versions of the Proposal attached to Secretary Perry's letter to the Commission and posted in this rulemaking docket do not contain this last limitation, but the version published in the Federal Register does. *See* 82 Fed. Reg. 46,940, 46,948 (Oct. 10, 2017). According to an errata notice, the Commission is seeking comment on the version in the Federal Register.

¹² *See, e.g.*, Commission Staff's Guidance on Formula Rate Updates (2014), *available at* <https://www.ferc.gov/industries/electric/indus-act/oatt-reform/staff-guidance.pdf>; *see also, e.g.*, PJM Interconnection, PJM Open Access Transmission Tariff, Docket No. ER17-2232-000, at 1580-1608, *available at* <http://www.pjm.com/directory/merged-tariffs/oatt.pdf> (annual transmission rates for Commonwealth Edison Company Network Integration Transmission Service).

B. The Proposal Is Fatally Lacking in the Meaningful Detail Necessary for Public Notice and Informed Public Comments.

The Proposal seeks to remake the wholesale electric markets to assure that certain resources fully recover from ratepayers their costs and guaranteed returns on their investments, despite the fact that those resources are no longer economically competitive. But the Proposal gives only the most generic guidance on how that recovery should occur and on what terms. Indeed, the proposed regulatory language is less than one page and provides no definitions of key terms like “resiliency,” “emergency,” “90-day fuel supply,” “fuel-assurance,” or “fully allocated costs and a fair return on equity.” *See* Proposal at 46,948. The preamble states the Proposal’s “crisis” rationale in conclusory fashion, without any record citations or evidence to indicate that the proposed action is necessary. *See* Proposal at 46,941-42.

This is not fair public notice. The Proposal is deficient on its face for failing to “provide sufficient factual detail and rationale for the rule to permit interested parties to comment meaningfully.” *Am. Water Works Ass’n v. EPA*, 40 F.3d 1266, 1274 (D.C. Cir. 1994) (citation omitted). Further, it would be improper for the Commission to develop a *post-hoc* rationale for the Proposal through assembly of a record during the comment period or thereafter; the rulemaking proposal itself must provide notice of the *agency’s* rationale and record support. *See* Hon. Harry T. Edwards et al., *Federal Standards of Review: Review of District Court Decisions and Agency Actions* ch. XIII.E (2013) (citing *Ass’n of Private Sector Colls. & Univs. v. Duncan*, 681 F.3d 427, 462 (D.C. Cir. 2012)); *Chamber of Commerce v. SEC*, 443 F.3d 890, 900 (D.C. Cir. 2006) (“By requiring the ‘most critical factual material’ used by the agency be subjected to informed comment, the [Administrative Procedure Act] provides a procedural device to ensure that agency regulations are tested through exposure to public comment, to afford affected parties an opportunity to present comment and evidence to support their positions, and thereby to

enhance the quality of judicial review.”). In this case, DOE drafted the Proposal, and the Proposal’s deficiencies are attributable to DOE. It is the Commission’s duty to decline to proceed with such a sweeping rulemaking on notice that is so deficient and vague.

C. Both DOE’s Directives and the Commission’s Timeline for Considering the Proposal Prevent Participants from Commenting Fully on the Many Complex Issues Raised by the Proposal.

The deadline for initial comments on the Proposal is set for 21 days following the Commission’s public notice, 19 days after Commission staff posted a detailed list of thirty questions about the Proposal, and a mere 12 days following the publication of the Proposal in the Federal Register, with reply comments due only 14 days later. This timeline closes the comment period on the Proposal in less than the 30-day post-publication period that is typically the bare minimum afforded for federal rulemaking, and far less than the 90 to 180 day comment periods, often preceded by Advance Notices of Proposed Rulemaking and their own comment periods, that major rulemaking proposals often require.¹³ The Commission’s denial of the many requests for an extension of the comment period, without supporting reasons, has compounded the prejudice to commenters. Moreover, given the vast volume of public comments expected on the Proposal, the Commission should allow more than a mere 14 days to file comments replying to the expected deluge of initial comments.

In this regard, DOE’s directive to take final action on the Proposal within 60 days also

¹³ See *supra* note 6; cf. Executive Order No. 12,866, 58 Fed. Reg. 51,735, § 6(a) (1993) (“[E]ach agency should afford the public a meaningful opportunity to comment on any proposed regulation, which in most cases should include a comment period of not less than 60 days.”); Office of the Federal Register, A Guide to the Rulemaking Process (2011), at https://www.federalregister.gov/uploads/2011/01/the_rulemaking_process.pdf (“In general, agencies will specify a comment period ranging from 30 to 60 days. . . For complex rulemakings, agencies may provide for longer time periods, such as 180 days or more.”).

improperly impinges on the Commission's responsibility to act in a deliberative and independent manner in accordance with the Department of Energy Organization Act. *See, e.g.*, 42 U.S.C. § 7173(b) (Commission has "exclusive jurisdiction" with respect to any proposal and shall act within "reasonable time limits"); *id.* § 7173(c) (Commission's use of rulemaking procedures to set rates under Federal Power Act procedures "shall assure full consideration of the issues and an opportunity for interested persons to present their views"); *id.* § 7171(d) ("In the performance of their functions, the members, employees or other personnel of the Commission shall not be responsible to or subject to the supervision or direction of any officer, employee or agent of any other part of" DOE.).

D. The Proposal Fails to Articulate a Reasoned Basis for Its Sweeping Changes to the Country's Electricity Markets.

In guaranteeing "full" cost recovery for a group of preferred resources, regardless of market outcomes, the Proposal would decisively break from the Commission's longstanding reliance on competitive wholesale markets to secure just and reasonable rates. As the Supreme Court has recently recognized, the Commission "undertakes to ensure 'just and reasonable' wholesale rates by enhancing competition—attempting . . . 'to break down regulatory and economic barriers that hinder a free market in wholesale electricity.'" *Elec. Power Supply Ass'n*, 136 S. Ct. at 768 (quoting *Morgan Stanley Capital Grp. v. Pub. Util. Dist. No. 1 of Snohomish Cnty.*, 554 U.S. 527, 536 (2008)); *see also* *Midwest Indep. Transmission Sys. Operator, Inc.*, 108 FERC ¶ 61,163 at P 371 n. 226 (2004) ("The Commission favors market design remedies, where possible, to provide needed revenues to support reliability-based generators and other needed investments.").

The Proposal contravenes decades of Commission precedent establishing and strengthening competition in the country's wholesale electric markets. Pursuant to Order 888, the

Commission required open access to transmission services, the foundation necessary for competitive wholesale electric markets in the United States. Order No. 888, *Promoting Wholesale Competition Through Open-Access Non-discriminatory Transmission Servs. by Pub. Utils.*, 61 Fed. Reg. 21,540 (May 10, 1996), *aff'd in part, rev'd in part*, 225 F. 3d. 667 (D.C. Cir. 2000), *aff'd sub nom. New York v. FERC*, 535 U.S. 1 (2002). Prior to the Commission's restructuring of the market under Order 888 and its successors, electricity delivery and supply were treated as monopoly services.¹⁴ Rates were based on cost-of-service rate-of-return ratemaking, which in some cases resulted in inefficient investment decisions and excessive costs.¹⁵ There was little competition among generators and no market discipline brought to bear on a generator's prices or costs. In many cases, ratepayers were saddled with the full costs of expensive and often over-budget power plants, and bore the downside risks that vertically integrated utilities incurred. See National Renewable Energy Laboratory, *Competitive Electricity Market Regulation in the United States: A Primer* at 9 (2016), at <https://www.nrel.gov/docs/fy17osti/67106.pdf> (hereinafter, "Competitive Electricity Market Regulation") (citing utility "overbuilding of [generation] capacity and the concomitant capital costs, [which] triggered rate increases," "utility mismanagement," and "lax regulatory oversight").¹⁶

¹⁴ In many states, electricity delivery and supply remain bundled and subject to cost-of-service regulation. However, the Proposal would exclude those resources from the rule. Proposal at 46,948, proposed rule § 35.28(g)(10)(i)(E).

¹⁵ The seminal work addressing the perverse incentives favoring inefficient investment ("gold-plating") as a result of cost-of-service regulation is the paper by Harvey Averch and Leland L. Johnson, *Behavior of the Firm Under Regulatory Constraint*, AM. ECON. REV., Vol. 52, No. 5, pp. 1052-1069 (Dec. 1962). The "Averch-Johnson" effect has been widely discussed in regulatory decisions at both the state and federal levels.

¹⁶ These features are not inevitable results of cost-of-service regulation of utility assets within the context of least-cost integrated resource planning and careful review of regulated utilities and

In issuing Order 888, the Commission's express goal was "to ensure that customers have the benefits of competitively priced generation." 61 Fed. Reg. at 21,550. Since its initial issuance of Order 888, the Commission has not wavered from its commitment to open wholesale electric markets and "the promise of an increasingly competitive commodity market in electric power, in which significant benefits to consumers can be achieved." *Id.* at 21,569. Many states, including certain states represented by the State Commenters, amended their state laws to replace the pricing of electricity through regulation with reliance on Commission-regulated wholesale electric markets to set the price of electricity.¹⁷

As part of the its implementation of competitive wholesale electric markets, the Commission consistently has promoted greater competition to benefit electric customers and, among other reforms, strongly has encouraged the organization of regional markets administered by independent system operators, which now serve two-thirds of the nation's electric customers. *See* Competitive Electricity Market Regulation at 9; *see also* Order No. 2000, *Regional Transmission Orgs.*, 89 FERC ¶ 61,285 (Dec. 20, 1999).¹⁸ According to the Commission, "[e]ffective wholesale competition protects consumers by providing more supply options, encouraging new entry and innovation, spurring deployment of new technologies, promoting

their costs by utility commissions, as evidenced by the successful regulatory regimes that govern transmission at the federal level and distribution (and in some states, generation) at the state level. The success of state regulation depends on the application of appropriate rules and fair procedures to govern the establishment of rates.

¹⁷ In the PJM region, for example, the price for electricity rose in the 2000s and began to fall in 2009 as new technologies developed and competition imposed discipline on market participants. *See* Monitoring Analytics LLC, State of the Market Report for PJM, Vol. 1, at 17, Table 9 (Mar. 2017), available at http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2016/2016-som-pjm-volume1.pdf.

¹⁸ *Order on reh'g*, Order No. 2000-A, 65 Fed. Reg. 810 (2000), *aff'd sub nom. Pub. Util. Dist. No. 1 of Snohomish Cnty. v. FERC*, 272 F.3d 607 (D.C. Cir. 2001).

demand response and energy efficiency, improving operating performance, exerting downward pressure on costs, and shifting risk away from consumers.” Order No. 719, *Wholesale Competition in Regions with Organized Elec. Mkts.*, 125 FERC ¶ 61,071 at P 1 (Oct. 17, 2008); *see also Midwest Indep. Transmission Sys. Operator, Inc.*, 108 FERC ¶ 61,163 at P 371 n.226 (“The Commission favors market design remedies, where possible, to provide needed revenues to support reliability-based generators and other needed investments.”). As a matter of Commission precedent, “[i]mproving the competitiveness of organized wholesale energy markets is therefore integral to the Commission fulfilling its statutory mandate to ensure supplies of electric energy at just, reasonable, and not unduly discriminatory or preferential rates.” Order No. 719 at P 1.

The Proposal turns this principle on its head by guaranteeing “full” cost recovery for certain preferred generation resources. *See* Proposal at 46,945 (“The rule allows the full recovery of costs of certain eligible units physically located within the Commission-approved organized markets [and] requires the organized markets to establish just and reasonable rate tariffs for the recovery of costs and a fair rate of return.”). Because those resources, unlike their competitors, would no longer need to recover their costs in the market, giving them “full” federally-guaranteed cost recovery would be a significant departure from the Commission’s policy of promoting competitive, fuel-neutral, non-discriminatory, and efficient wholesale markets. It could be justified, as part of the Commission’s statutory responsibilities, only, if ever, upon a clear showing of necessity to ensure electric system reliability. That showing has not been

made.¹⁹ Instead, electric customers would invariably have to pay those costs, regardless of how high they are, and customers will bear the investment risks now borne by resource owners.

The Proposal is profoundly different from state credit-based programs that incentivize utilities' procurement of particular resources. Those state programs neither guarantee full cost recovery, nor remove categories of resources from the competitive wholesale market. Rather, those programs are one means by which states exercise their traditional authority to regulate electric generation. *See* Section VI.B, *supra*.

As the Proposal is unmoored from specific and demonstrable reliability concerns or other legal authority, its preferential treatment of uncompetitive resources would also depart from the Commission's statutory obligation and longstanding position that wholesale electric markets should ensure an open and level playing field for generating and other resources. 16 U.S.C. §§ 824d(a), (b); *see, e.g., Indianapolis Power & Light Co.*, 158 FERC ¶ 61,107 at P 69 (2017) (market rules that "unnecessarily restrict[] competition" by excluding certain resources are "unjust, unreasonable, and unduly discriminatory or preferential"); Order No. 745, *Demand Response Compensation in Organized Wholesale Energy Markets*, 134 FERC ¶ 61,187 at P 59

¹⁹ The nation's RTOs are committed to preserving and strengthening competitive electric markets that ensure reliability. In the wake of the Proposal, this view was reaffirmed by ISO New England ("ISO-NE"), which has overseen and successfully managed substantial retirements of coal and nuclear resources in recent years. *See* Notice, ISO-NE, *Study on Regional Fuel Security to be Delayed Pending Resolution of DOE Proposal on Grid Resiliency Pricing* at 1 (Oct. 13, 2017), available at https://www.iso-ne.com/static-assets/documents/2017/10/20171013_fuel_security_analysis_delay_final.pdf ("ISO-NE Delay Notice") ("Competitive markets have worked effectively in New England to bring forward the resources needed to ensure reliable power system operations while reducing power system emissions and wholesale power prices. Reliability services can be provided by a wide range of resources and technologies, including those that have onsite fuel, and the ISO believes that the most efficient solution is to procure those services through a competitive market whenever feasible. Providing full cost recovery for certain technologies and not others will ultimately undermine the competitive wholesale market construct and lead to cost-of-service for all resources.").

(2011) (“removing barriers to demand response participation” in markets “facilitates greater competition”).²⁰

Such an irrational and unexplained departure from the Commission’s precedents would be unlawful. Under the Administrative Procedure Act, when an agency reverses existing policy, it must show a change in circumstances and policy and provide strong reasons for disregarding prior factual and policy conclusions. As the D.C. Circuit has recently explained, when reversing existing policy:

[T]he Supreme Court has held that “the [Administrative Procedure Act] requires an agency to provide more substantial justification when its new policy rests upon factual findings that contradict those which underlay its prior policy; or when its prior policy has engendered serious reliance interests that must be taken into account.” . . . “It is not that further justification is demanded by the mere fact of policy change[,] but that a reasoned explanation is needed for disregarding facts and circumstances that underlay or were engendered by the prior policy.” . . . “Put another way, ‘it would be arbitrary and capricious to ignore such matters.’”

U.S. Telecom Ass’n v. FCC, 825 F.3d 674, 708-09 (D.C. Cir. 2016) (citing *Elec. Power Supply Ass’n*, 136 S. Ct. at 784), *reh’g denied*, 855 F.3d 381 (D.C. Cir. 2017), *petitions for cert. filed* (U.S. Sept. 27, 2017) (No. 17-498 et al.); *see also* 5 U.S.C. § 706; *La. Pub. Serv. Comm’n v. FERC*, 184 F.3d 892, 894, 897 (D.C. Cir. 1999) (“arbitrary and capricious” for Commission to “without an explanation . . . depart[] from its own precedent” (citing *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 57)); *Mich. Pub. Power Agency v. FERC*, 405 F.3d 8, 16 (D.C. Cir. 2005) (remanding for further explanation where Commission failed to adequately explain new

²⁰ *Order on reh’g*, Order No. 745-A, 137 FERC ¶ 61,215 (2011), *reh’g denied*, Order No. 745-B, 138 FERC ¶ 61,148 (2012), *vacated sub nom. Elec. Power Supply Ass’n v. FERC*, 753 F.3d 216 (D.C. Cir. 2014), *rev’d & remanded sub nom. FERC v. Elec. Power Supply Ass’n*, 136 S. Ct. 760 (2016).

policy). The Proposal thus fails to address factual or policy changes that would justify a radical shift away from market pricing, does not recognize the consequences to parties that have placed “serious reliance” upon the wholesale market rules, and fails to meet the standard for reversing existing Commission policy.

III. The Proposal Is Unnecessary to Support System Reliability.

On its own terms, the Proposal is a solution for a problem that does not exist. First and foremost, there is no evidence that electric system reliability is in any present danger. As discussed below, DOE’s own staff report confirmed this reality earlier this year, *see* DOE Staff Report at 10 & *infra* Section IV.B, as did Commission staff in an October 19, 2017 report to the Commission providing its assessment of energy market conditions during the upcoming winter.²¹

Nor do the ongoing retirements of resources with on-site fuel present an emergency requiring immediate out-of-market Commission actions. With the Commission’s approval, numerous regional markets operate capacity and other markets to ensure that they have adequate generation resources to meet peak customer demand plus a reserve margin, and thus ensure system reliability over time. FERC Staff Report No. AD13-7-000, *Centralized Capacity Mkt. Design Elements*, at 2 (Aug. 2013), at <http://www.ferc.gov/CalendarFiles/20130826142258-Staff%20Paper.pdf> (“[T]he primary goal of each of these markets is the same: ensure resource adequacy at just and reasonable rates through a market-based mechanism that is not unduly discriminatory or preferential as to the procurement of resources.”). The capacity markets provide additional payments to generators and other resources to supplement energy revenues, in recognition of the fact that energy revenues alone may not be sufficient for some generators to

²¹ FERC Staff, Winter 2017-18 Energy Market Assessment (Oct. 19, 2017), *available at* <https://www.ferc.gov/market-oversight/reports-analyses/mkt-views/2017/10-19-17-A-3.pdf> (“Winter Energy Market Assessment”).

recover their costs and remain viable. *Id.* The Commission has reviewed the capacity market rules regularly in response to complaints and tariff filings, and, in recent years the Commission has approved modifications to capacity markets so that they compensate capacity based on availability and performance at times of high demand. *See, e.g., PJM Interconnection*, 155 FERC ¶ 61,157 at P 29 (Tying “resource compensation to a resource’s actual performance, is consistent with fundamental principles of fairness. Resources should be compensated in proportion to their performance.”).

The Proposal applies only to the RTOs that have established these capacity markets, apparently amounting to a judgment that those markets have wholly failed to meet their objectives and should be scrapped. Proposal at 46,948. To the contrary, these capacity markets are successful in procuring needed capacity to ensure system reliability in the regions where they operate.²²

- In 2016, ISO New England’s (“ISO-NE”) tenth annual capacity auction included stringent requirements to ensure resource performance at times of system stress, concluded at lower price than the previous auction, and procured sufficient resources, including three new conventional power plants, as well as capacity from solar and offshore and onshore wind facilities, to meet projected New England demand in 2019-2020.²³
- In PJM Interconnection’s (“PJM”) most recent capacity auction held in May 2017 and applicable in 2020-2021, the reserve margin for the entire RTO was 23.3%, that is, 6.7% higher than the target reserve margin of 16.6%. In other words, existing PJM resources exceed peak demand by 23.3%, demonstrating that there is sufficient reliable generation available to serve all customers in the PJM region. Moreover, in PJM capacity auctions covering 2017/2018 through 2020/2021, new generation and generation uprates (increased capacity) ranging from 2,823.8 megawatts (“MW”) to 6,267.3 MW cleared the auction. PJM further reports that

²² For information on capacity markets not discussed here, see the comments filed in this docket by certain State Commenters’ respective state utilities regulators.

²³ Press Release, ISO-NE, *Finalized Capacity Auction Results Confirm 10th FCA Procured Sufficient Resources, at a Lower Price, for 2019–2020* (Feb. 29, 2016), at https://www.iso-ne.com/static-assets/documents/2016/02/20160229_fca10_finalresults.pdf.

from 2007/2008 to 2020/2021, the net increase in installed capacity, including generation retirements and additions, demand response, and energy efficiency, equals 22,701 MW in the PJM region.²⁴

- In the Midcontinent Independent System Operator (“MISO”) region, the most recent offers of capacity exceeded the reserve margin by 5.5%, resulting in a region-wide price of \$1.50 per MW-day, reflecting the existence of more than sufficient generation resources to meet regional demand.²⁵

The fact that certain older, uneconomic resources do not clear the auctions and are retiring is not evidence that capacity markets are failing; to the contrary, these markets have ensured replacement of retiring resources with new capacity in a manner that has met regional installed capacity and reserve requirements and maintained system reliability.²⁶ Against this backdrop, there is no need for the Proposal, or anything similar, to safeguard system reliability.²⁷

²⁴ PJM, *2020/2021 RPM Base Residual Auction Results* at 2-3, 19 (2017), available at <http://www.pjm.com/~media/markets-ops/rpm/rpm-auction-info/2020-2021-base-residual-auction-report.ashx>.

²⁵ MISO, *2017/2018 Planning Resource Auction Results* at 5 (2017), available at <https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/RASC/2017/20170510/20170510%20RASC%20Item%2002a%202017-18%20PRA%20Summary.pdf>.

²⁶ See, e.g., *ISO New England Inc. and New England Power Pool Participants Comm.*, 158 FERC ¶ 61,138, at P 9 (2017) (“One purpose of capacity markets is to send appropriate price signals regarding where and when new resources are needed.”); *Long Island Power Auth. v. N.Y. Indep. Sys. Operator, Inc.*, 120 FERC ¶ 61,071, at P 14 (2007) (“the [capacity] market would benefit customers by encouraging the construction of new capacity”); *N.Y. Indep. Sys. Operator, Inc.*, 103 FERC ¶ 61,201, at P 36 (2003) (“NYISO’s analyses adequately demonstrate that the proposal will benefit customers because it will encourage the construction of new generation.”), *aff’d sub nom Elec. Conservation Res. Council v. FERC*, 407 F.3d. 1232 (2005); *ISO New England Inc.*, 148 FERC ¶ 61,201, 2014 WL 4637550, at *4 (2014) (LaFleur, concurring) (“Forward Capacity Market (FCM) plays a vital role in ensuring reliability in New England. [It] is the mechanism that ensures future system reliability by procuring capacity resources sufficient to meet New England’s resource adequacy needs.”).

²⁷ The Commission has preexisting tools to address short-term reliability issues that may arise from the retirement of a particular resource, including approval of reliability-must-run agreements with generators, which “should be of a limited duration so as to not perpetuate out-of-market solutions that have the potential, if not undertaken in an open and transparent manner, to undermine price formation” in the wholesale market. *N.Y. Indep. Sys. Operator, Inc.*, 150 F.E.R.C. ¶ 61,116 at P 2 (2015).

It is hard to envision how the Proposal could co-exist with capacity and other markets. With no incentive to recover fixed costs through markets, favored resources theoretically could recover both market and cost-based revenues, or rely exclusively on cost-based revenues and exit the market altogether, causing future auctions to fail. The Proposal would unacceptably undermine if not destroy the many years of hard work by the Commission, the RTOs, and market participants and stakeholders (including the States) to refine and adjust the capacity and other market constructs employed by the country's RTOs. The Commission should instead continue its longstanding efforts to work with RTOs and stakeholders to improve capacity and other markets.

Moreover, the Commission, the nation's RTOs, and other reliability organizations have already developed both markets and cost-based rates to compensate providers of power-related services that are necessary for reliability, such as black-start capabilities and spinning reserves. *See, e.g.,* Competitive Electricity Market Regulation at 14-15. These services have been addressed in established, deliberative processes that provide the opportunity for stakeholders, including generators, utilities, consumers, and the Commission, to participate in ensuring that the nation's electric grid meets the Commission-approved reliability standards promulgated under section 215 of the Federal Power Act, 16 U.S.C. § 824(o), which was enacted as part of the Energy Policy Act of 2005.

In contrast to the more inclusive processes approved by the Commission to address market issues, the Proposal reflects a top-down approach that departs from the decision-making process undertaken by the nation's RTOs, in collaboration with the States and other stakeholders. *See, e.g.,* Order No. 719 at P 477 (finalizing requirements for RTOs and ISOs that reaffirm importance of "responsiveness" by RTOs and ISOs, i.e., "willingness, as evidenced in its practices and procedures, to directly receive concerns and recommendations from customers and

other stakeholders, and to fully consider and take actions in response to the issues that are raised”). In the refinement of capacity markets and in many other areas, regional markets have institutionalized reliability and system planning within extensive stakeholder processes under the Commission’s oversight.²⁸

In past approaches to address the very fuel supply issues that the Proposal purportedly seeks to cure, the Commission has followed a more deliberative and bottom-up process to investigate potential market improvements. In 2016, for example, the Commission approved changes to the PJM capacity market as a part of its “broader effort, by the RTOs, market participants, and the Commission, to adapt the nation's wholesale electric markets to the underlying changes in how electricity is generated and ensure that reliability is sustained during and after that transition.” *PJM Interconnection*, 155 FERC ¶ 61,157, at P 25. The Commission stated:

[I]n recent years, the Commission has convened technical conferences specifically addressing the operation of wholesale capacity markets and the increasing importance of coordination between the electric and natural gas industries for the reliability of the nation's electricity supply. Those efforts have resulted in both regional market changes, such as ISO New England, Inc.’s Pay for Performance capacity market reforms (upon which PJM’s Capacity Performance program is modeled), and national changes to communication and coordination processes between the natural gas and electric industries.

²⁸ In general, stakeholder processes are recognized as vital contributors to the development of regional market rules. Mark James et al., *How the RTO Stakeholder Process Affects Market Efficiency*, R Street Policy Study No. 112, at 19 (October 2017), available at <http://www.rstreet.org/wp-content/uploads/2017/10/112.pdf> (“Stakeholder-governance processes are essential to the efficient development of market rules. Our research and interviews discovered a consensus that these processes are generally working well and serve the needs of the stakeholder community.”). State agencies, consumer advocates, and utility commissions generally have “seats at the table” and regularly participate in and influence these processes. *Id.* at 2, 11.

Id. See, e.g., Centralized Capacity Markets in Reg'l Transmission Organizations & Indep. Sys. Operators Winter 2013-2014 Operations & Mkt. Performance in Reg'l Transmission Orgs. & Indep. Sys. Operators, 149 FERC ¶ 61,145 at P 19 (2014) (providing “each RTO/ISO the opportunity to identify the fuel assurance issues most relevant to its markets and comprehensively describe the set of actions it has already undertaken or proposes to undertake to address these issues”).²⁹ Whether or not all stakeholders have agreed with the particular outcomes of these market initiatives, the joint efforts by RTOs, stakeholders, and the Commission to improve system reliability and market performance in the face of a changing resource mix reflect the fitness and durability of Commission oversight to address wholesale market challenges, including the alleged challenges described in the Proposal. The Proposal provides no reason for the Commission to depart from its practice of engaging market participants and other stakeholders through deliberative and inclusive inquiries that draw on

²⁹ RTOs continue to conduct analysis of these issues. ISO-NE is in the midst of completing a study regarding fuel security, and the Proposal has compelled it to indefinitely delay the study’s release and the subsequent stakeholder discussions of potential market changes to address any fuel security issues it identifies. *See* ISO-NE Delay Notice, *supra* note 19, at 2 (“The identification of appropriate market design improvements will be a complex undertaking and will require a systematic and deliberative regional process for examining the risks and potential solutions. The ISO planned to discuss the study results with stakeholders over the remainder of 2017 and into early 2018 and begin discussions of solutions after that process. The ISO’s goal has always been to work with stakeholders—market participants, regulators, policymakers, and others—to address New England’s unique fuel-security challenges through the wholesale market construct. However, the US DOE NOPR has raised the potential for significant changes to the wholesale electricity markets in the US. Therefore, the ISO has concluded that it is prudent to delay finalizing the study until the [Commission] has provided direction to the industry on how to interpret the DOE NOPR in the context of competitive wholesale markets. ISO New England intends to release the Operational Fuel-Security Analysis once the NOPR is sufficiently resolved.”).

RTO stakeholder processes that provide vital opportunities for the exchange of data and ideas prior to adopting market rule or pricing changes.³⁰

IV. The Proposal Is Contrary to the Findings of the Department of Energy Staff Report and Other Credible Analyses.

The Proposal relies heavily on the August 2017 DOE Staff Report on electric markets and reliability. *See* Proposal at 46,941. The bulk of the DOE Staff Report provides a summary of trends in the wholesale electric market, including the retirement of certain generation resources, the increasing use of low-cost natural gas, and the integration of variable energy resources like wind and solar.³¹ The report does not support the Proposal's dire characterization of the power sector, finding rather that the electric system is currently reliable. In general, the report recommends additional work on issues that the Commission is currently addressing and further study and review of electric system resilience. In sum, although the State Commenters do not necessarily endorse the findings and policy recommendations in the report, it suffices here to point out that the report does not support the Proposal's immediate and drastic regulatory intervention in the nation's wholesale markets. Moreover, other credible analysis shows that the Proposal's picture of an electric system under siege from "baseload" resource retirements,

³⁰ *See, e.g.*, PJM, Capacity Construct and Public Policy Senior Task Force, CCPPSTF Matrix (Oct. 16, 2017), *available at* <http://www.pjm.com/-/media/committees-groups/task-forces/ccppstf/20171016/20171016-ccppstf-matrix.ashx> (logging the development of interest identification, design criteria, key work activities, and capacity market rule change proposal packages relating to a two-tier capacity market to ensure adequate resources are procured by PJM's Reliability Pricing Model).

³¹ The DOE Staff Report responded to three issues posed by Secretary Perry in an April 2017 memorandum, namely, "[t]he evolution of wholesale electricity markets"; "[w]hether wholesale energy and capacity markets are adequately compensating attributes such as on-site fuel supply and other factors that strengthen grid resilience and, if not, the extent to which this could affect grid reliability and resilience in the future"; and "[t]he extent to which continued regulatory burdens, as well as mandates and tax and subsidy policies, are responsible for forcing the premature retirement of baseload power plants." DOE Staff Report at 1.

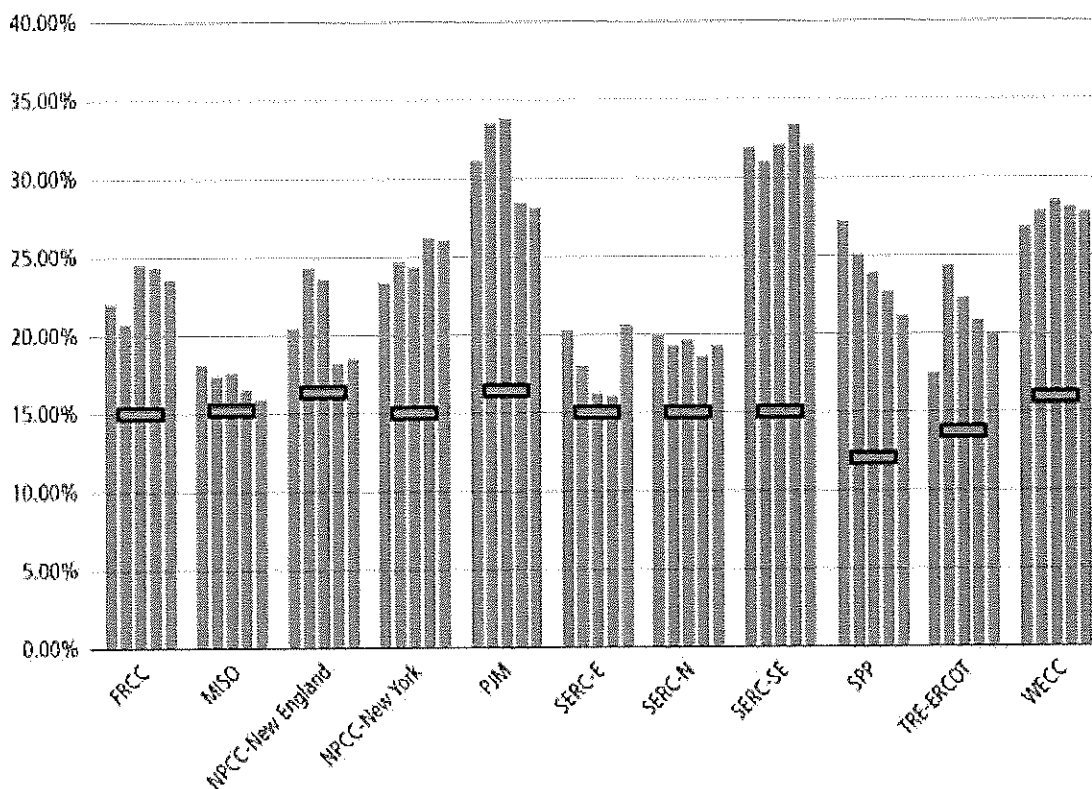
unreliable replacement resources, and extreme-weather disruptions to fuel supplies is simply not accurate.

A. The Staff Report Indicates that Electric System Reliability Is Adequate.

The DOE Staff Report expressly affirms the reality that the nation's bulk power system has successfully managed changing market conditions in recent years, including significant levels of retirements of certain resources, and is currently reliable. Specifically, the report confirms:

- “[Bulk power system] reliability is adequate despite the retirement of a portion of baseload capacity and unique regional hurdles posed by the changing resource mix.” DOE Staff Report at 11.
- “[Bulk power system] reliability is adequate today despite the retirement of 11 percent of the generating capacity available in 2002, as significant additions from natural gas, wind, and solar have come online since then. Overall, at the end of 2016, the system had more dispatchable capacity capable of operating at high utilization rates than it did in 2002.” *Id.* at 63.
- “To date, wholesale markets have withstood a number of stresses. While markets have evolved since their introduction, they are currently functioning as designed—to ensure reliability and minimize the short-term costs of wholesale electricity—despite pressures from flat demand growth, Federal and state policy interventions, and the massive economic shift in the relative economics of natural gas compared to other fuels.” *Id.* at 10.
- Over the longer term, “NERC reports that all regions project more than sufficient planning reserve margins. . . . [P]lanning reserve margins exceed their respective regional targets despite the loss of traditional baseload capacity since 2002.” *Id.* at 65. The DOE Staff Report contains a chart, *id.* at 66, showing these planning reserve margins through 2022:

Figure 4.2. Five-Year Average Reserve Margins across Different Regions (2018–2022)²³¹



The Proposal does not reference these findings, which confirm there is significant capacity above the RTO reserve margins and contradict its assertion that “immediate action is necessary” to ensure reliability. The DOE Staff Report also does not support the Proposal’s assertion that “immediate action is necessary” because further power plant retirements will cause “severe consequences,” Proposal at 46,945. *See* DOE Staff Report at 8. The report recognizes that retirements are happening, and states that “[w]hile stakeholders may maintain that a power plant has been forced to retire prematurely based on one or more of the considerations above, the results of this study show that some observed power plant retirements were appropriate and consistent with markets as they are currently functioning.” *Id.*; *see also id.* at 11 (“Markets recognize and compensate reliability, and must evolve to continue to compensate reliability, but more work is needed to address resilience.”). The retirement of generation before the end of its

useful life may be an appropriate market response if the costs associated with that plant are sufficiently higher than those of their competitors.

B. The DOE Staff Report Recommends Further Analysis of Resilience and Wholesale Market Changes, Not an Immediate Regulatory Intervention.

To the extent the DOE Staff Report identifies issues and challenges in the wholesale electric markets, it urges continued work on valuing reliability services but primarily recommends further review, analysis, and study of system resilience, and actions consistent with those assessments. For example:

- The DOE Staff Report finds that “[a] continual comprehensive regional and national review is needed to determine how a portfolio of domestic energy resources can be developed to ensure grid reliability and resilience.” DOE Staff Report at 14.
- “Where feasible and within its statutory authority, [the Commission] should study and make recommendations regarding efforts to require valuation of new and existing [essential reliability services] by creating fuel-neutral markets and/or regulatory mechanisms that compensate grid participants for services that are necessary to support reliable grid operations. *Pricing mechanisms or regulations should be fuel and technology neutral* and centered on the reliability services provided.” *Id.* at 126 (emphasis added).
- In looking forward, the DOE Staff Report suggests that “[r]esource portfolios could be complemented with wholesale market and product designs that recognize and complement resource diversity by compensating providers for the value of [essential reliability services] on a *technology-neutral* basis. *More work is needed* to define, quantify, and value resilience.” *Id.* at 100 (emphasis added).
- “*RTOs and ISOs* should further define criteria for resilience, identify how to include resilience in business practices, and examine resilience-related impacts of their resource mix.” *Id.* at 126 (emphasis added).

In those respects in which the DOE Staff Report recommends that policymakers act quickly, it suggests that those actions should be market-based, fuel-neutral, and consistent with the processes followed for successful RTO-driven reforms of recent years:

New market structures may be necessary to reflect [changing] market dynamics . . . RTO/ISOs are considering ways to better

support system resilience objectives in the same way that they explicitly recognized and administratively incorporated reliability standards into dispatch practices in the past. For example, the variety of problems that arose during the Polar Vortex . . . caused PJM and ISO-NE to change their capacity market rules to ensure generator performance during scarcity conditions. In summary, the debates surrounding wholesale markets are complex and multifaceted, but *the institutions and the grid itself have historically proven flexible, strong, and able to adapt*. Questions about revenue sufficiency and resilience must be addressed quickly, before the fast-moving evolution of our power system outpaces our ability to understand and manage it responsibly.

Id. at 118 (emphasis added); *see also id.* at 126 (Commission “should expedite its efforts with states, RTO/ISOs, and other stakeholders to improve energy price formation in centrally-organized wholesale electricity markets. After several years of fact finding and technical conferences, the record now supports energy price formation reform, such as the proposals laid out by PJM and others”).

While citing improvement in energy price formation, the DOE Staff Report does not recommend that RTOs provide full cost recovery for favored resources, as the Proposal would require. Only in the report’s final section, “Areas for Further Research,” does it intimate that cost-of-service treatment for certain resources is a potential option to promote system resilience. *Id.* at 129. The report suggests that the states—not the federal government—should “explore the costs and benefits” of such an approach. *Id.*

C. Other Studies Demonstrate that the Proposal’s Focus on “Baseload” Resources and Fuel Supply Is Flawed.

The Commission should look to independent analyses of the electric markets, which confirm that actual power sector conditions and experience show that the premises of the Proposal’s approach of rescuing uneconomic generation resources with federal intervention are mistaken. For example, in June 2017 the international economics consulting firm Analysis Group

published a report, *Electricity Markets, Reliability and the Evolving U.S. Power System* (“Analysis Group Report”),³² which rebutted the Proposal’s understanding that recent changes in the wholesale electric markets and resource retirements are imperiling electric system reliability:

The retirement of aging resources is a natural element of efficient and competitive market forces, and where markets are performing well, these retirements mainly represent the efficient exit of uncompetitive assets, resulting in long-run consumer benefits Although some commentators have raised concerns that the declining financial viability of certain conventional power plant technologies (like coal and nuclear power plants) that operate as merchant units in several wholesale electricity markets may be jeopardizing electric system reliability, there is no evidence supporting that conclusion.

Analysis Group Report at 4-5. The report also cited the promise of advanced energy technologies in serving future reliability needs:

Many advanced energy technologies can and do provide reliability benefits by increasing the diversity of the system. The addition of newer, more technologically advanced and more efficient natural gas and renewable technologies is rendering the power systems in this country more, rather than less, diverse. These newer generating resources are also contributing to the varied reliability services—such [as] frequency and voltage management, ramping and load-following capabilities, provision of contingency and replacement reserves, black start capability, and sufficient electricity output to meet demand at all times—that electric grids require to provide electric service to consumers on an around-the-clock basis. As a result, increasing quantities of natural gas and renewable generation are increasing the diversity of the power system and supporting continued reliable operations.

Id. at 5. In this regard, the Proposal also ignores DOE’s own analyses of the reliability benefits of adding renewable energy to the grid. For example, a recent study by the National Renewable

³² Paul Hibbard et al., *Electricity Markets, Reliability and the Evolving U.S. Power System*, Analysis Group (June 2017), available at http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/ag_markets_reliability_final_june_2017.pdf.

Energy Laboratory (“NREL”) concluded that with high penetrations of wind and solar power, the Western grid can maintain reliability and stability during large grid disturbances; and, in fact, renewable energy can contribute to a more, not less, reliable power grid.³³ Other analyses similarly identify the capabilities of renewable resources and new technologies to support grid reliability and resilience, which the Proposal arbitrarily ignores.³⁴

Contrary to the Proposal’s misconceptions, fuel supply issues played essentially no role in recent customer outages. A recent analysis by the Rhodium Group analyzed DOE data on the causes of the 3.4 billion customer-hours of outages from 2012 to 2016. Of that time, only 2,382 hours, or 0.00007 percent of the total, was due to fuel supply problems. Of those, 2,333 hours

³³ National Renewable Energy Laboratory, *Western Grid Can Handle High Renewables in Challenging Conditions* (Fact Sheet) (Nov. 2015), available at <https://www.nrel.gov/docs/fy16osti/65302.pdf> and <https://www.nrel.gov/grid/wwsis.html>.

³⁴ The Brattle Group consultancy recently published a report reaching much the same conclusions. Judy Chang et al., *Advancing Past “Baseload” to a Flexible Grid*, Brattle Group, at iv (June 2017), available at http://www.brattle.com/system/publications/pdfs/000/005/456/original/Advancing_Past_Baseload_to_a_Flexible_Grid.pdf?1498482432 (“[G]iven the current trends of market fundamentals, public policy goals, and customer preferences, labeling any resources as “baseload” and compensating them on that basis alone does not help improve our electricity system’s reliability, efficiency, or effectiveness. System planners and operators have been and are continuing to improve mechanisms for mobilizing and compensating the flexibility services that are needed to maintain a cost-effective and reliable electricity system.”); *id.* at 13 (“Despite these significant retirements and the associated shift [in] resource mix, system operators have been able to meet the industry’s high and increasing reliability standards.”); *id.* at 23 (“The market designs for centralized wholesale markets in the U.S. are quite sophisticated and evolving to provide the necessary incentives to a broad range of resources that can contribute to system reliability.”); *id.* at 31 (“[T]echnologies, market fundamentals, policy priorities, and customer preferences are changing rapidly—all pointing to an increasingly broad range of different supply and demand resources; a more dynamic and versatile grid that can operationally integrate these resources and new technologies; and wholesale power markets that will increasingly reward both supply and demand resources for providing well-defined services and attributes such as energy, capacity, flexibility, and emissions reductions.”).

were due to fuel supply disruptions at a coal-fired power plant in northern Minnesota.³⁵ The most prevalent cause of outages is severe weather, with Hurricane Sandy accounting for nearly-one third of the total hours of power lost over that period. Puerto Rico's nearly complete power outage in the wake of Hurricane Maria has already accounted for nearly twice the total number of outage hours for 2016.³⁶

D. The Proposal Is Not Responsive to the Circumstances of the Polar Vortex or Recent Extreme Weather Events.

The Proposal says that its proposed tariffs are necessary to address electric reliability issues that are illustrated by the widespread cold-weather event during the winter of 2014 known as the Polar Vortex, as well as other extreme weather events. The Proposal further suggests it should be finalized in time to protect against cold-weather events this coming winter. *See* Proposal at 46,945.³⁷ The Proposal's account of electric system challenges during those events is deeply flawed, and the circumstances of those events do not support the Proposal.

With regard to the Polar Vortex, large swaths of the eastern and southern parts of the United States faced sustained and record-setting cold weather during that period. According to NERC's post-mortem analysis, less than 0.1 percent of customer load was disrupted in the

³⁵ Trevor Houser et al., *The Real Electricity Reliability Crisis*, Rhodium Group (Oct. 3, 2017), at <http://rhg.com/notes/the-real-electricity-reliability-crisis>.

³⁶ *Id.*

³⁷ Commission staff's recent report on energy market conditions during the upcoming winter utterly contradicts the supposed urgency of implementing the Proposal, concluding that "[a]ll regions are expected to maintain healthy reserve margins for the winter," "[s]taff analysis identifies few major concerns," "[t]he markets appear to be prepared to manage disruptive events" and "at this time we do not see major risk factors that would likely lead to significant market disruptions during this winter." Winter Energy Market Assessment at 13, 19.

affected areas, and system operators “successfully maintained reliability. . . .”³⁸ In fact, the affected load was in South Carolina Electric and Gas service territory, which is not part of an organized wholesale market, and the outages were caused by frozen equipment at generators, *not* by fuel supply issues.³⁹ While much of the commentary regarding the Polar Vortex has focused on curtailment of natural gas supplies for electric generation, according to NERC, fuel supply issues accounted for less than half of the generator outages associated with the Polar Vortex. Instead, the majority were associated with the direct effects of cold weather on generation and transmission equipment. *Id.* at 4-5. For example, at the height of the cold weather, PJM reported that more than 15,000 MW of its coal and nuclear resources were offline.⁴⁰ In short, fuel supply was only one of several causes of electric system stress during the Polar Vortex,⁴¹ and there is no evidence that a system with fewer coal and nuclear resources would fare worse in the future,

³⁸ See NERC, *Polar Vortex Review* at iii (2014), at http://www.nerc.com/pa/rrm/January%202014%20Polar%20Vortex%20Review/Polar_Vortex_Review_29_Sept_2014_Final.pdf.

³⁹ *Id.* at iii, 2, 3.

⁴⁰ PJM Interconnection, *Analysis of Operational Events and Market Impacts During the January 2014 Cold Weather Events* at 26 (May 8, 2014), available at <http://www.pjm.com/~media/library/reports-notice/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-cold-weather-events.ashx>. See also *id.* at 4 (“Equipment issues associated with both coal and natural gas units caused the greatest proportion of forced outages. Natural gas interruptions comprised approximately 25 percent of the total outages.”); *id.* at 24 (“All conventional forms of generation, including natural gas, coal and nuclear plants, were challenged by the extreme conditions.”). See also MISO, *2013-2014 MISO Cold Weather Operations Report* at 25 (Nov. 2014), available at <https://www.misoenergy.org/Library/Repository/Report/Seasonal%20Market%20Assessments/2013-2014%20Cold%20Weather%20Operations%20Report.pdf> (“[G]enerating units of all fuel types in MISO’s footprint were affected by weather-related forced outages during the January 2014 polar vortex.”).

⁴¹ Nor are fuel supply issues unique to natural gas facilities. See MISO, *supra* note 40, at 13 (noting that “at least one power plant in MISO’s footprint that has coal delivered to it via barge experienced problems due to iced-over rivers and lakes”).

especially given the many market reforms that have occurred since the Polar Vortex. Just as importantly, resources other than coal and nuclear played a significant role in maintaining system reliability, including energy efficiency, demand response, and renewables.⁴²

All generation sources face challenges from extreme weather.⁴³ Even with on-site fuel supplies, the Proposal's favored resources do not always have the ability to run in challenging weather events, based on recent experience. For instance, in Texas, following Hurricane Harvey's torrential flooding, the external coal pile at the 2,500 MW W.A. Parish coal power plant was "so saturated with rainwater that coal was unable to be delivered into the silos from the conveyer system," and two units at the facility were switched to natural gas.⁴⁴ In Florida, as Hurricane Irma approached in September, one of the state's two nuclear power plants shut down, and the other ran at reduced capacity.⁴⁵ These anecdotes demonstrate that the Proposal's

⁴² See, e.g., Susan Tierney et al., *Electric System Reliability and the EPA's Clean Power Plan: The Case of PJM*, Analysis Group, at 12-13 (Mar. 2015), available at http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/electric_system_reliability_and_epas_clean_power_plan_case_of_pjm.pdf (PJM utilized demand response and wind generation to meet demand, despite substantial loss of coal, nuclear, and natural gas capacity); Greg Hresko et al., *Wind Energy Saves Consumers Money During the Polar Vortex*, American Wind Energy Association, at 1 (Jan. 2015), available at <http://awea.files.cms-plus.com/AWEA%20Cold%20Snap%20Report%20Final%20-%20January%202015.pdf> ("[W]ind energy provided large quantities of critical electricity supply when it was needed most, keeping the lights on and reducing the impact of these price spikes").

⁴³ A profound irony of the Proposal is that it seeks to prolong operations at coal-fired power plants and also their substantial greenhouse gas emissions, which are worsening the risks of extreme weather events that are driven or exacerbated by climate change. The Proposal does not mention or acknowledge that its approach could increase greenhouse gas emissions. See Section VI.C, *infra*.

⁴⁴ See Mark Watson, *Harvey's Rain Caused Coal-to-Gas Switching*, Platts (Sept. 27, 2017), at <https://www.platts.com/latest-news/electric-power/houston/harveys-rain-caused-coal-to-gas-switching-nrg-21081527>.

⁴⁵ See *Hurricane Irma Caused Power Outages for Two out of Three Florida Customers*, Electric Light & Power (Sept. 20, 2017), at <http://www.elp.com/articles/2017/09/hurricane-irma-caused-power-outages-for-two-out-of-three-florida-customers.html> ("Hurricane Irma also affected Florida's two nuclear power plants, which are among the largest power plants in the state. Both

assumptions about the resilience of the favored resources are false, and that the resilience values of other resources warrant greater consideration.⁴⁶

V. The States' Experiences with Clean Energy Development and the Retirement of Aging, Uneconomic Generation Demonstrates There is No Pressing Reliability or Resilience Crisis Warranting Extraordinary Federal Intervention.

The Proposal's alarm regarding the growth of renewable resources (*see, e.g.*, Proposal at 46,943) is at odds with our States' success in integrating clean energy sources into the electric sector. For example:

- **California** has made rapid advances towards integration of renewable supply-side technologies and demand-side programs while simultaneously managing the retirement of baseload plants. Since 2003, procurement by California's large investor owned utilities⁴⁷ has resulted in 15,565 MW of installed renewable capacity under the Renewables Portfolio Standard ("RPS") program.⁴⁸ The average RPS portfolio for these utilities, which serve about 68% of California's electrical load, grew from 13.25% in 2003 to 32% in 2016.⁴⁹ On May 16, 2017, over 40% of California ISO ("CAISO") load was served with renewables (not including large hydro or behind-the-meter solar PV), and during peak renewables

reactors at the Turkey Point nuclear power plant in south Florida were shut down as a precaution before the storm arrived. The St. Lucie nuclear power plant remained operating, although at reduced levels.").

⁴⁶ See Amory B. Lovins, *Does 'Fuel on Hand' Make Coal and Nuclear Power Plants More Valuable?*, Forbes (May 1, 2017), at <https://www.forbes.com/sites/amorylovins/2017/05/01/does-fuel-on-hand-make-coal-and-nuclear-power-plants-more-valuable/#4a0d9d5c69023>.

⁴⁷ Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison.

⁴⁸ Cal. Pub. Utils. Comm'n, *Renewables Portfolio Standard Quarterly Report* at 6 (4th quarter 2016), available at http://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/Utilities_and_Industries/Energy/Reports_and_White_Papers/Q4_2016_RPS_Report_to_the_Legislature_FINAL.pdf.

⁴⁹ Cal. Pub. Utils. Comm'n, *Biennial RPS Program Update* (Jan. 2016), available at <http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=8323S>. See also Cal. Pub. Utils. Comm'n, Proceeding No. R.15-02-020, available at https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROCEEDING_SELECT:R1502020 (containing investor-owned utilities' RPS compliance filings).

production that day, renewables supplied nearly 72% of CAISO's electricity.⁵⁰ Renewable technologies contributed significantly to meeting CAISO system load during a record breaking heat wave on September 1, 2017, with the vast majority of that contribution coming from solar photovoltaic installations.⁵¹

- In **Connecticut**, the state has implemented policies that have directly procured commitments of renewable energy generation and energy efficiency that equal the generation of a large power plant, at competitive pricing. Specifically, in 2016 alone, the state procured over 400 MW of state-solicited small scale renewable energy and energy efficiency resources, 170 MW of which will be located in Connecticut, and close to 400 MW of large-scale renewable energy projects split between Connecticut, Massachusetts, and Rhode Island. The price of these selected grid-scale bids dropped by nearly half compared to procurements in 2012 and 2013. Using its procurement authority thus far, Connecticut has solicited long-term contracts with clean energy resources to meet over 5% of its electric load. Connecticut has authority remaining to contract an additional approximate 17% of load with clean energy resources.⁵² These procurements have expressly focused on renewable resources that provide generation during peak load times, directly strengthening grid reliability and resilience.⁵³
- In **Illinois**, there is currently more than 4,000 MW of wind power installed, growing from just 50 MW in 2003.⁵⁴ Illinois wind farms produced 612,000 megawatt hours ("MWh") of electricity in July 2017, up 52% from the prior

⁵⁰ CAISO, *Renewables Watch for Operating Day May 16, 2017*, at http://content.caiso.com/green/renewrpt/20170516_DailyRenewablesWatch.pdf; Gavin Bade, *CAISO: Renewables Served 42% of California Demand on May 16, Setting Record*, Utility Dive (May 18, 2017), at <http://www.utilitydive.com/news/caiso-renewables-served-42-of-california-demand-on-may-16-setting-record/442926/>. Note that the RPS program measures compliance in MWh, whereas CAISO data measure load percentages in MW.

⁵¹ CAISO, *Renewables Watch for Operating Day September 01, 2017*, at http://content.caiso.com/green/renewrpt/20170901_DailyRenewablesWatch.pdf.

⁵² Connecticut Department of Energy and Environmental Protection, *2017 Comprehensive Energy Strategy, Draft Executive Summary* (July 26, 2017), available at http://www.ct.gov/deep/lib/deep/energy/ces/2017_draft_comprehensiveenergystrategy_execsummary.pdf.

⁵³ See *Affordable and Reliable Energy*, 2015 Conn. Legis. Serv. P.A. 15-107 (S.B. 1078) (enacted), available at <https://www.cga.ct.gov/2015/act/Pa/pdf/2015PA-00107-R00SB-01078-PA.PDF>.

⁵⁴ American Wind Energy Association, *Illinois Wind Facts*, available at <https://www.awea.org/resources/statefactsheets.aspx> (last visited Oct. 21, 2017).

year.⁵⁵ Over the last year, nuclear power remained essentially constant, and coal based generation decreased 8.8%, while still providing 6,417,000 MWh of energy in 2017.⁵⁶

- **In Maryland**, approximately 1,458 MW of generation capacity comes from renewable resources.⁵⁷ Maryland customers currently have access to over 750 MW of installed solar power, with 276.9 MW of installed solar energy having been added in 2016 alone.⁵⁸ Marylanders also have access to over 250 MW of installed wind power, and the state has taken significant steps toward the development of its offshore wind resources. In May 2017, the Maryland Public Service Commission awarded offshore wind renewable energy credits to two projects, which will pave the way for the construction of 368 MW of capacity off the coast of Maryland.
- **Massachusetts** renewable and clean energy projects have added or are in the process of adding a total of approximately 26,000,000 MWh of annual electricity for Massachusetts customers (expected to be over 50% of Massachusetts's annual electric load) under either statutory or regulatory mandates pursuant to the Green Communities Act, St. 2008, c. 169, §§ 83, 83A, 83C, and 83D, and the Renewable Portfolio Standards, Mass. Gen. Laws ch. 25A, § 11F.⁵⁹
- **Oregon** is the eighth-ranked state in the nation for installed wind capacity, with 3,213 MW in operation.⁶⁰ A total of forty-four projects span the state, with the first project installed in 1998. Individual utility-scale wind projects range from 10

⁵⁵ U.S. Energy Information Administration, Electric Power Monthly (Sept. 2017 release), available at https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_1_14_a.

⁵⁶ U.S. Energy Information Administration, Electric Power Monthly (Sept. 2017 release), available at https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_1_09_a (nuclear); https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_1_04_a (coal).

⁵⁷ See Maryland Department of Natural Resources, *Maryland Power Plants and the Environment: A Review of the Impacts of Power Plants and Transmission Lines on Maryland's Natural Resources*, DNR Publication No. 12-12132016-638 (Dec. 2016), available at http://www.pprp.info/ceir18/CEIR_18_Summary%20FINAL.pdf.

⁵⁸ See Solar Energy Industries Association, *Solar State by State*, at <https://www.seia.org/state-solar-policy/maryland-solar> (last visited Oct. 21, 2017).

⁵⁹ These projects include onshore and offshore wind, hydropower, and solar. Some of these projects are already in operation, some are under contract and awaiting regulatory approval prior to construction, some are constructed and waiting for interconnection, and others are in the bidding stage.

⁶⁰ American Wind Energy Association, *Oregon Wind Facts*, at <https://www.awea.org/resources/statefactsheets.aspx> (last visited Oct. 21, 2017).

MW to nearly 900 MW.⁶¹ As of mid-2017, the wind projects in Oregon powered the equivalent of over 660,000 homes.

- **Vermont** has over 200 MW of installed solar (about 5% of sales and 20% of peak load) and over 100 MW of installed wind (about 6% of sales), not to mention 200 MW of hydropower and approximately 100 MW of biopower (biomass and farm and landfill methane). The State's electric utilities are on course to meet their 55% renewable electricity by 2017 targets, and are required to meet 75% of sales with renewable electricity by 2032. *See* 30 Vt. Stat. Ann. § 8005(a)(1)(B). All utility and merchant generation in Vermont is subject to state siting regulation and must adhere to a number of criteria, including need, least-cost principles (for utility-owned generation, this entails an examination of whether the investment is the least-cost solution to demand when compared with energy conservation, efficiency, and load management), and maintenance of system stability and reliability. *See, e.g.,* 30 Vt. Stat. Ann. § 248(b). The State gradually lifted its net metering cap from 2% to 4% to 15% of load as no adverse negative impacts to system stability were observed, and now there is no set cap. *See* 30 Vt. Stat. Ann. § 8010 (Self-Generation and Net-Metering); Vt. Admin. Code 18-1-17:5.100 (Construction and Operation of Net Metering Systems).
- **Washington** is one of the top ten states in the nation for installed wind capacity, having successfully integrated over 3,000 MW of wind power since 2001.⁶² In 2016 alone, the energy produced from wind in Washington powered the equivalent of almost 750,000 homes.⁶³

In addition, many states and regional markets have successfully managed the retirement of coal and other uneconomic resources and are pursuing innovations that will benefit system reliability and resilience, including market-based compensation for demand response and investments in energy efficiency, energy storage, and other technologies. For example:

- As the DOE Staff Report noted with respect to energy storage, “**California** has directed its utilities to acquire 500 MW of energy storage by 2020; **Massachusetts** [has set a target for electric companies] to procure 200 MWh of energy storage by the end of 2019; **New York**’s legislators have proposed

⁶¹ Renewable Northwest Project, Renewable Energy Projects, *at* http://www.rnp.org/project_map?field_project_state_value%5B%5D=OR&tid%5B%5D=7&field_project_opstatus_value%5B%5D=Operating (last visited Oct. 21, 2017).

⁶² U.S. Energy Information Administration, Washington State Profile (2016), *at* <https://www.eia.gov/state/analysis.php?sid=WA>.

⁶³ American Wind Energy Association, Washington Wind Facts, *at* <https://www.awea.org/resources/statefactsheets.aspx> (last visited Oct. 21, 2017).

creation of an Energy Storage Deployment Program, with a 2030 procurement target; **Maryland** has adopted at 30 percent investment tax credit for storage facilities; and **Nevada**'s legislature has passed a storage incentivize. These programs are generally technology-neutral and will support the use of storage at the grid-level or behind the meter (on the customer's premises)." DOE Staff Report at 74.

- **California**, through its Public Utilities Commission, has authorized a competitive procurement mechanism for demand response resources, known as the Demand Response Auction Mechanism ("DRAM") pilot. The objective of the DRAM is to ensure competitively priced, cost-effective and reliable demand response resources for the state. Demand response resources procured through the DRAM are required to bid their capacity into CAISO energy markets for market award dispatches, with approximately 184 MWs under contract for delivery in 2018. In addition, California has prioritized development of energy storage through a 1.325 gigawatt procurement mandate, reliability standards, creation of wholesale market products and rules with the Distributed Energy Resource Provider and Non-Generator Resource models, and approving storage contracts to meet local reliability needs and partially replace the San Onofre nuclear generating station. California regulators developed a roadmap to consider and eliminate unnecessary regulatory barriers to storage market participation and are in the process of developing rules by which a storage resource can serve multiple reliability functions.⁶⁴
- **Connecticut** has developed a first-in-the-nation statewide microgrid program to build local resiliency for electrical load in critical community operations. This program implementation now includes five operational microgrids and five in development.⁶⁵ Through its conservation and load management program, Connecticut invests approximately \$246 million annually in statewide energy efficiency programs that has saved residents and businesses 1.29 billion kWh of electricity, 19.6 million ccf of gas, and 976 thousand tons of carbon dioxide.⁶⁶ In addition, through its 2016 solicitations for clean energy resources, Connecticut solicited through a competitive process an additional 34 MW of energy efficiency at a competitive price.⁶⁷

⁶⁴ California Energy Commission, California Public Utilities Commission & CAISO, *Advancing and Maximizing the Value of Energy Storage Technology – A California Roadmap* (Dec. 2014), available at https://www.caiso.com/Documents/Advancing-MaximizingValueofEnergyStorageTechnology_CaliforniaRoadmap.pdf.

⁶⁵ See Connecticut Department of Energy & Environmental Protection, *supra* note 52.

⁶⁶ Connecticut Department of Energy & Environmental Protection, *Energy Efficiency*, available at <http://www.ct.gov/deep/cwp/view.asp?a=4405&Q=513716>.

⁶⁷ *Id.*

- **Maryland** is encouraging energy efficiency through the State's EmPOWER program, which was first enacted in 2008. *See* EmPOWER Maryland Energy Efficiency Act of 2008, H.B. 374, 2008 Gen. Assemb., Reg. Sess. (Md. 2008). Implementation of the EmPOWER program led to a 15% reduction in demand based on a 2007 baseline. During the 2017 legislative session, the Maryland General Assembly extended the EmPOWER program through 2023. *See* H.B. 514, 2017 Gen. Assemb., Reg. Sess. (Md. 2017). In addition, Maryland has started to explore energy storage using grid-connected battery systems as an important tool that will facilitate the integration of renewable energy, bolster grid reliability, and provide for flexibility in the grid. In 2017, the Maryland General Assembly adopted measures both to encourage the installation of energy storage through a dedicated tax credit⁶⁸ and to study methods to promote the deployment of energy storage on all parts of the electricity grid.⁶⁹ *See* S.B. 758, 2017 Gen. Assemb., Reg. Sess. (Md. 2017) (tax credit); H.B. 773, 2017 Gen. Assemb., Reg. Sess. (Md. 2017) (methods study). The Maryland Public Service Commission is also considering how energy storage may advance the goal of transforming state's distribution system.⁷⁰
- In **Massachusetts**, 1,662 MW of coal generation capacity has been retired since 2008, leaving no coal fired power plants in the state. At the same time, Massachusetts has invested heavily in developing a robust clean energy industry, as detailed *infra*, and has become a national leader in energy efficiency. Further, it is actively exploring storage technologies, and the Department of Energy Resources issued a report last fall with the goal of spurring investment in 600 MW of grid-scale energy storage in Massachusetts by 2025.⁷¹
- Spurred by the 1988 bankruptcy of its largest utility as triggered by cost overruns and construction delays at the Seabrook nuclear power plant, **New Hampshire** was among the first states to opt for restructuring, *see* N.H. Laws 1996, ch. 129,

⁶⁸ Maryland's new tax credit provides for up to \$5,000.00 for a system installed on a residential property and the lesser of \$75,000 or 30% of the cost of installation of a system installed on a commercial property.

⁶⁹ The law requires that Maryland's Power Plant Research Program conduct a study—in collaboration with other state stakeholders—and submit a report by December 1, 2018, as to the regulatory reforms and market incentives necessary or beneficial to increase the use of energy storage devices in the state.

⁷⁰ *See* Maryland Public Service Commission, *In The Matter of Transforming Maryland's Electric Distribution Systems to Ensure that Electric Service is Customer-Centered, Affordable, Reliable and Environmentally Sustainable in Maryland*, PC44, Notice of Public Conference, at 3 (Sept. 26, 2016).

⁷¹ Massachusetts Department of Energy Resources, *State of Charge: Massachusetts Energy Storage Initiative Study* (Sept. 16, 2016), available at <https://www.mass.gov/files/2017-07/state-of-charge-report.pdf>.

but lawmakers then paused the process as to the utility's non-nuclear generation portfolio, including two coal-fired plants—Merrimack and Schiller Stations—because relying on these facilities was cheaper for end-users than purchasing power at wholesale. But technological and market realities evolved and, in 2015, the New Hampshire Legislature authorized the completion of the restructuring process, provided that the Public Utilities Commission made a “public interest” finding that considered general economic and specific ratepayer impacts. *See* N.H. Laws 2015, ch. 221:10, codified as N.H. RSA 369-B:3-a. On October 12, 2017, the utility filed the results of the asset divestiture auction.⁷² If approved, the proposed sale of Merrimack and Schiller stations would result in some \$600 million in stranded cost recovery for the utility, in exchange for which ratepayers would no longer be required to subsidize the operation of coal plants whose dispatch pattern in recent years has reduced them to occasionally used resources.

- The only operating coal plant in **Oregon** is in Boardman and is scheduled for closure in 2020. The plant owner, Portland General Electric, is testing the potential to convert the plant into a renewable energy generation facility using biomass for fuel.⁷³ Oregon investor-owned electric utilities are exploring energy storage because the passage of HB 2193 (2015) mandates energy storage be installed at each utility by 2020. Through a collaborative stakeholder process at the Oregon Public Utilities Commission (Docket UM 17510), the utilities are focusing on many potential benefits of energy storage, including increasing transmission and distribution reliability and increasing energy system resiliency.⁷⁴
- The capacity of **Vermont's** solar installations alone is equivalent to one-fifth of the state's peak load, and every new proposed project is required to meet interconnection standards to ensure it does not adversely affect system stability and reliability. While solar has shifted Vermont's peak from mid-day to evening, the state's peak has declined due to the state's aggressive pursuit of conservation and energy efficiency, and utilities are adjusting to changes in load shape using traditional tools such as rate design, load shifting, and demand response as well as emerging tools such as real-time weather forecasting and advanced energy storage. Vermont currently has a large utility-owned battery storage project that

⁷² J.P Morgan Securities, LLC, *Public Service Company of New Hampshire d/b/a Eversource Energy Sale of Generating Facilities: Report of the Auction Advisor*, N.H. Pub. Utils. Comm'n Docket No. 17-254 (Oct. 12, 2017), available at http://puc.nh.gov/Regulatory/Docketbk/2017/17-124/LETTERS-MEMOS-TARIFFS/17-124_2017-10-12_JPMORGAN_AUCTION_RPT.PDF; *see also* New Hampshire Public Utilities Commission, Docket No. 17-124, available at <https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-124.html>.

⁷³ Portland General Electric, Resource Planning, at <https://www.portlandgeneral.com/our-company/energy-strategy/resource-planning> (last visited Oct. 21, 2017).

⁷⁴ Oregon Public Utilities Commission, Docket UM-17510, available at <http://apps.puc.state.or.us/edockets/docket.asp?DocketID=19733>.

reduces utility peaks, integrates solar, and can enhance grid reliability by islanding a distribution circuit hosting the local emergency shelter in the event of a wider grid outage. That same utility is pursuing other solar-plus-storage projects and is also embarking on a pilot to deploy up to 10 MW of residential storage systems to provide grid services in the aggregate and reliability to individual customers.

VI. The Proposal Poses a Serious Threat of Harm to the States and Excessive Costs for Ratepayers.

The State Commenters are deeply concerned that, in its current form, the Proposal would cause significant harm to our States by compelling ratepayers to subsidize costly power generation resources without demonstrated need or benefit, undermining State energy laws and policies, and by putting public health and the environment at greater risk.

A. A Federal Mandate to Subsidize the “Fuel-Secure” Resources Will Significantly and Unnecessarily Raise Energy Costs for Consumers.

There is no question that the Proposal will burden ratepayers with additional costs and risks. Indeed, the Proposal makes no attempt to argue otherwise.⁷⁵ Rather, the whole point of the Proposal is to charge customers more money and to give that money to uneconomic generation resources so they do not retire. One early analysis estimates potential added customer costs in the billions of dollars per year.⁷⁶ Yet, the Proposal provides no assessment of, or justification for,

⁷⁵ As noted in Sections I, II.A, and II.B, *supra*, the Proposal provides no analysis regarding the customer costs. The absence of a cost analysis is cause enough for the Commission to reject it.

⁷⁶ See Robbie Orvis et al., *The Department of Energy’s Grid Resilience Pricing Proposal: A Cost Analysis*, Energy Innovation (Oct. 2017), available at http://energyinnovation.org/wp-content/uploads/2017/10/20171021_Resilience-NOPR-Cost-Research-Note-FINAL.pdf (annual cost to customers conservatively estimated at \$2.4 -10.6 billion); ICF International, Inc., *DOE Acts to Transform the Energy Landscape*, at 27 [Webinar] (Oct. 4, 2017), available at <https://www.icf.com/resources/webinars/2017/doe-nopr> (cost could reach \$3.8 billion per year); see also Jeff St. John, *FERC Commissioners and Staff Question DOE’s Push for Cost Recovery for Coal and Nuclear*, Greentech Media (Oct. 10, 2017), at <https://www.greentechmedia.com/articles/read/ferc-commissioners-and-staff-question-does-push-for-cost-recovery-for-coal#gs.lnQFaSg>.

those costs or the value of what customers will get in return. Indeed, no one has provided customers or their state representatives with any cost information nor consulted with them about whether they think a federal mandate to spend extra money to prevent the retirement of these uneconomic facilities is reasonable. Moreover, unlike other types of targeted incentives that the federal government and states provide under specific laws to advance public policies, customers will pay all of the direct costs associated with full cost recovery for the preferred, otherwise non-competitive generation, and will also bear all the monetary risks associated with the operation, maintenance, and capital of the subsidized generation. This burden on customers is precisely what the wholesale markets are designed to avoid. The Proposal would result in an extraordinary transfer of wealth from customers to generation owners with only undefined and unquantified customer benefits, if any, but certain adverse environmental and public health effects.⁷⁷

B. The Proposal Undermines State Energy Laws and Policies.

Of great concern to the State Commenters are the implications of the Proposal for our respective state laws and policies regarding energy, including State restructuring statutes and renewable energy and climate goals. Overall, it is clear that the Proposal directly subsidizes generation resources in a manner that intrudes on states' role as overseers of "the economic aspects of electrical generation," *Pacific Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n*, 461 U.S. 190, 206 (1983); *see also* Federal Power Act, § 201(b)(1), 16 U.S.C. § 824(b)(1) (Commission lacks general jurisdiction over "facilities used for the generation of

⁷⁷ In this sense, the Proposal is quite different from recently-established state zero-emission-credit programs that provide additional incentives to nuclear generation under state law authorities. These programs tie resource compensation to certain measurable environmental attributes that benefit air quality, public health, and the states' achievement of greenhouse gas emission reduction goals. *See, e.g.,* Illinois Power Agency Act, § 1-75(d-5), 20 ILCS 3855/1-5 *et seq.* (2016).

electric energy”). In this regard, the Proposal effectively overrides the choices made by the states with restructured electric markets to allow those markets, along with other policy decisions by states to promote alternative energy sources and to secure reductions in power sector emissions, to guide capacity additions and retirements, and the choices made by states with traditional cost-of-service regulation to retire facilities in the best interest of ratepayers.⁷⁸ For example:⁷⁹

Regional Greenhouse Gas Initiative

- First implemented in 2009, the Regional Greenhouse Gas Initiative (“RGGI”) is a mandatory market-based program of nine states in the Northeast and Mid-Atlantic that seeks to reduce power sector greenhouse gas (“GHG”) emissions.⁸⁰ The RGGI states have established a regional cap on carbon dioxide (“CO₂”) emissions from electric generators and require power plants to possess a tradable CO₂ allowance for each ton of CO₂ they emit.⁸¹ The emissions cap is set at 84.3 million short tons in 2017, and declines 2.5 percent each year until 2020 to about 78.2 million tons. The RGGI states are working diligently to meet their commitments, and in August 2017, announced a further CO₂ reduction to 55.7 million tons by 2030. This represents a 65 percent drop from regional CO₂ levels in 2009.⁸² By subsidizing coal generation sources, the Proposal would directly impede the achievement of the RGGI states’ emissions reduction goals.

California

- California is implementing numerous statutory mandates to support greenhouse gas reductions and mitigate climate change. Significant recent examples include the following:

⁷⁸ This intrusion into state prerogatives is in conflict with the Commission’s recent decisions, including Order No. 1000, which mandates regional transmission planning to *accommodate* state energy policies. See Order No. 1000, Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 76 Fed. Reg. 49,842 (Aug. 11, 2011).

⁷⁹ For additional information, see the comments filed by certain State Commenters’ respective state utilities regulators in this docket.

⁸⁰ The nine states are: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont.

⁸¹ Regional Greenhouse Gas Initiative, Inc., *About the Regional Greenhouse Gas Initiative Fact Sheet* (June 2017), available at https://www.rggi.org/docs/Documents/RGGI_Fact_Sheet.pdf.

⁸² Alex Guillen, *RGGI States Plan Further 30 Percent Emissions Cut by 2030*, Politico (Aug. 23, 2017), at <http://www.politico.com/states/new-york/albany/whiteboard/2017/08/23/rggi-states-proposed-further-30-percent-emissions-cuts-by-2030-8613376>.

- SB 350 (De Leon),⁸³ which requires the state to establish GHG reduction planning targets through integrated resource planning for the electricity sector and increases the state's RPS to 50 percent by 2030.
- SB 32 (Pavley),⁸⁴ which codified an emissions reduction target of 40 percent below 1990 levels by 2030.
- SB 1383 (Lara),⁸⁵ which requires the development of a Short-Lived Climate Pollutant Strategy and sets forth specific 2030 targets:
 - 40 percent reduction in methane from 2013 levels;
 - 40 percent reduction in hydrofluorocarbon gases from 2013 levels; and
 - 50 percent reduction in anthropogenic black carbon.
- California has significantly reduced its coal capacity and as a result has seen significant greenhouse gas emissions reductions over the past decade.⁸⁶ The Proposal encourages an increased procurement of coal resources, which conflicts with California's energy goals and the direction the state has taken on maintaining a low-carbon grid.

Connecticut

- Connecticut introduced restructuring in 1998 in order to gain access to energy markets to benefit ratepayers.⁸⁷ Removing a significant part of the region's generation from competitive markets would frustrate that purpose and could prolong the life of coal-fired plants that would threaten timely achievement of Connecticut's Global Warming Solutions Act goals. The state's most recent inventory shows that the State has reduced greenhouse gas emissions 4 percent below 1990 levels and 14 percent below 2001 levels. Connecticut's statutory goal is to reduce emissions to 10% below 1990 levels by 2020 and 80% below 2001 levels by 2050. Conn. Gen. Stat. § 22a.200c.

⁸³ Available at https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350.

⁸⁴ Available at https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32.

⁸⁵ Available at https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB1383.

⁸⁶ California Air Resources Board, *2017 Edition California GHG Emissions Inventory: California Greenhouse Gas Emissions for 2000 to 2015 – Trends of Emissions and Other Indicators* (June 2017), available at https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2015/ghg_inventory_trends_00-15.pdf.

⁸⁷ See Connecticut Department of Energy and Environmental Protection, *supra* note 52.

Illinois

- In Illinois, the Electric Service Customer Choice and Rate Relief Act of 1997, 220 ILCS 5/16-101A, ushered in a transition to a competitive market for electric generation with the goal of employing competitive forces to “create new opportunities for new products and services for customers and lower costs for users of electricity.” Illinois law maintains the core statutory goals of ensuring the provision of “safe, reliable, and affordable service” by relying on market forces to keep prices just and reasonable. The law in Illinois is based on “the competitiveness of supply and [] price-responsiveness of the demand for service.” 220 ILCS 5/16-101A(f).
- The Illinois Energy Efficiency Portfolio Standard requires the state’s largest utilities to invest in energy efficiency and demand response measures, which help customers save energy and reduce usage during periods of high demand on the grid. Illinois’s largest utility, Commonwealth Edison Company (“ComEd”), which serves Chicago and a large part of Northern Illinois, recently reported that energy efficiency efforts have helped save customers 21.5 million MWh of energy—enough to power more than 2.3 million homes for a year—and has created customer savings of \$2.3 billion on electric bills. State legislation enacted in 2016 directed an expansion of energy efficiency programs in Illinois. For example, under the law, ComEd now has a goal of increasing efficiency programs to ultimately produce a 21.5 percent reduction in energy use by 2030. These efficiency efforts in Illinois reduce demands on the system, thereby increasing reliability and resiliency and obviating the need for expensive policies such as those Proposal.
- Since the restructuring of Illinois’s electricity laws, the risks and rewards associated with generation have been managed by generation owners. For example, NRG acquired six coal plants in Illinois through its subsidiary Midwest Generation, and repowered one of them to natural gas, keeping it operating.⁸⁸ It also closed two urban coal plants, reducing air pollution in city neighborhoods with no effect on resource adequacy.⁸⁹ Dynegy currently owns twelve fossil fuel plants: eight are coal, three are natural gas and one is coal and gas.⁹⁰ Dynegy has

⁸⁸ *Illinois coal plant to close a unit in clean-air move*, Crain’s Chicago Business (Aug. 7, 2014), available at <http://www.chicagobusiness.com/article/20140807/NEWS11/140809839/illinois-coal-plant-to-close-a-unit-in-clean-air-move>.

⁸⁹ Julie Wernau, *Redevelopment ahead for Chicago’s two coal plant sites*, Chicago Tribune (Dec. 1, 2014), available at <http://www.chicagotribune.com/business/ct-crawford-fisk-sites-1130-biz-20141126-story.html>.

⁹⁰ Dynegy Inc., *Dynegy in Illinois* (Feb. 2017), available at <https://www.dynegy.com/sites/default/files/dynegy-factsheet-Illinois.pdf>.

closed or suspended operations of five other units in Illinois.⁹¹ Despite these closings, Dynegy has sufficient capacity to meet as much as 95% of the MISO Zone 4 local clearing requirement (5,561 MW vs. 5,836 MW in the latest capacity auction).⁹²

- Prolonging the life of coal-fired power plants that are facing market signals to retire may make it more difficult or expensive to achieve the Illinois Renewable Portfolio Standard, which requires that 25% of the state's energy come from resources like wind and solar by 2025. Pursuant to state legislation enacted in 2016, the Illinois Power Agency is currently procuring one million renewable energy credits from new utility-scale wind and solar projects, which will provide energy at lower cost than energy from uneconomic coal plants.

Maryland

- In Maryland, the Electric Utility Industry Restructuring of 1999 required a transition to a competitive market for electric generation with the stated goals of, *inter alia*, establishing customer choice, providing economic benefits for all customer classes, and ensuring compliance with federal and state environmental standards. *See* S.B. 300, 1999 Gen. Assemb., Reg. Sess. (Md. 1999). Prolonging the life of coal-fired power plants in Maryland that might otherwise be close to retirement would threaten the progress achieved through RGGI, which Maryland is required to be a part of pursuant to Maryland's Healthy Air Act, Environ. Art. §§ 2-1001 through 2-1005. Through Maryland's participation in RGGI, Maryland has made a commitment to the use of renewable energy and achieving the State's climate goals. Maryland also has a robust renewable portfolio standard ("RPS"), which was created by law in 2004. It is a two-tiered system with carve-outs for solar energy and offshore wind energy, and corresponding renewable energy credits ("RECs") for each tier. Electric utilities and other electricity suppliers must submit RECs equal to a percentage specified in statute each year or else pay an alternative compliance payment ("ACP") equivalent to their shortfall. Over the past few years, the requirements have been met almost entirely through RECs, with negligible reliance on ACPs. In 2016, Maryland increased its RPS, requiring utilities to derive 25 percent of their energy from renewable resources by 2020. *See* H.B. 1106, 2016 Gen. Assemb., Reg. Sess. (Md. 2016).

⁹¹ Jacob Barker, *Why is Dynegy idling Illinois coal plants? It's more complicated than 'the war on coal'*, St. Louis Post-Dispatch, (May 28, 2016), available at http://www.stltoday.com/business/local/why-is-dynegy-idling-illinois-coal-plants-it-s-more/article_7a1bd217-a83d-579b-93a8-d17b86de27c4.html.

⁹² MISO, *supra* note 25, at 9.

Massachusetts

- In 1997, the Massachusetts Legislature enacted the Electric Industry Restructuring Act to restructure its electric utility industry. *See* Mass. St. 1997, ch. 164. The general purpose of the Restructuring Act was to take electric utilities out of the generation portion of the electricity business. *See* Mass. Gen. Laws ch. 164, §1A(b)(2) (referencing the electric companies' "requirement to divest generation facilities"). The Massachusetts Department of Public Utilities ("Department") has held that its limited role over the generation component of electricity service following the Restructuring Act "represents a clear policy choice that electric generation resources are best developed in response to price signals from a competitive marketplace." *Investigation by the Dep't of Pub. Utils.*, Mass. D.P.U. 12-77, at 28 (2013). More importantly, by moving electricity generation outside of the Department's jurisdiction and into the competitive marketplace, the Department found that the Restructuring Act "shifted the risks of generation development from consumers to generators, who are better positioned to manage those risks." *Id.* This shift in risk allowed consumers to benefit from lower prices for electricity while also enjoying protection from the "construction, operational, and prices risks that were inherent in commodity rate regulation." *Id.* Clearly, if the Commission were to impose on Massachusetts ratepayers a "cost-of-service" regime to support coal and nuclear generating resources, it would directly interfere with and contradict the Massachusetts legislature's intent to shield ratepayers from the operational risks and investment decisions of all generating resources.
- Further, Massachusetts's major investments in renewables and energy efficiency are deliberate efforts to create a clean energy industry and to address the risks of climate change. The Proposal is directly at odds with the energy policy chosen by Massachusetts. Massachusetts has adopted a broad portfolio of laws and regulations to reduce economy-wide greenhouse gas emissions by 25 percent by 2020 and 80 percent by 2050 from 1990 levels, including the Global Warming Solutions Act (2008), the Green Communities Act (2008), the Act to Promote Energy Diversity (2016), RGGI, and programs to promote low and zero-emission vehicles, among others. The clean energy industry is a powerful and growing economic engine for Massachusetts. The state has seen consistent growth across all aspects of the clean energy sector, from energy efficiency to alternative transportation, to renewable energy development. Clean energy contributes \$11.8 billion to the Massachusetts economy— a 2.5 percent share of the gross state product—and its employees account for 2.9 percent of the state's labor market. Since 2010, the number of clean energy jobs has increased dramatically — 45,000 new clean energy jobs have been added, a 75 percent increase.⁹³ This success has

⁹³ Massachusetts Clean Energy Center, *2016 Massachusetts Clean Energy Industry Report*, at 3-4, 8 (Dec. 2016), *available at* [http://files.masscec.com/2016%20MassCEC CE Report Complete%20%281%29-2.pdf](http://files.masscec.com/2016%20MassCEC%20CE%20Report%20Complete%20%281%29-2.pdf).

shown that states can grow their economies through investing in clean energy and reducing greenhouse gas emissions. The Proposal's attempt to force Massachusetts to subsidize nuclear and fossil fuel generating resources in contravention of its carefully developed renewable energy and climate policies is overreaching and inappropriate.

New Hampshire

- When New Hampshire became one of the first states to embrace wholesale and retail competition in the electric industry in 1996, it did so “to develop a more efficient industry structure and regulatory framework that results in a more productive economy by reducing costs to consumers while maintaining safe and reliable electric service with minimum adverse impacts on the environment.” N.H. RSA 374-F:1, I. The Legislature declared that competitive markets (as distinct from traditional cost-of-service regulation) “should provide electricity suppliers with incentives to operate efficiently and cleanly, open markets for new and improved technologies, provide electricity buyers and sellers with appropriate price signals, and improve public confidence in the electric utility industry.” *Id.* at II. The industry has evolved since 1996 and, accordingly, in 2008 New Hampshire authorized utilities to make (and to include in rate base) certain new investments related to generation—but, in contrast to the reliance on fossil and nuclear resources of the past, these new investments are limited to “renewable and clean distributed energy resources.” N.H. RSA 374-G:1 (noting that such investments “provide energy security and diversity by eliminating, displacing or better managing traditional fossil fuel energy deliveries from the centralized bulk power grid”).

Vermont

- Vermont has a number of state energy laws and policies that can only be achieved by reducing load, strategically electrifying the heating and transportation sectors, and meeting demand with renewable energy. *See, e.g.*, 30 Vt. Stat. Ann. § 202a(1), (2) (goals include efficiency, environmentally sound energy supply, and wise use of renewables). Tariffs that support non-renewable resources to the detriment of renewables will adversely impact the State's ability to meet its policy goal of 90% renewable energy across all sectors by 2050.⁹⁴ Such tariffs will also adversely impact Vermont's governing statutory requirements and goals to:
 - Reduce greenhouse gases 50% from 1990 levels by 2028 and 75% by 2050, 10 Vt. Stat. Ann. § 578(a);
 - Supply 25% of all energy use with in-state renewables by 2025, 10 Vt. Stat. Ann. § 580;

⁹⁴ *See* Vermont Department of Public Service, *Comprehensive Energy Plan 2016*, at 2, available at <https://goo.gl/8CxYjU> (90% goal).

- Increase the energy efficiency of 25% of homes by 2020, 10 Vt. Stat. Ann. § 581; and
- Meet 55% of electricity sales with renewable energy by 2017 and 75% by 2032, with 10% coming from small electric generators that are connected to and support Vermont's distribution grid, 30 Vt. Stat. Ann. § 8005(a)(1), (2).

C. Federal Intervention to Prolong the Life of Coal-Fired Power Plants Will Exacerbate the Public Health and Environmental Harms Caused by Such Facilities.

The Proposal's major aim appears to be to halt the market exit and retirement of aging coal-fired power plants. Yet, our states have significantly benefitted from the markets' movement away from coal-fired power plants. With retirements, reduced utilization, and new pollution controls at coal-fired power plants nationwide, air pollution from the power sector has dropped, significantly improving air quality and public health, especially among the elderly, people with respiratory disease, and children.⁹⁵ These improvements include reductions in mercury and other toxic emissions; mercury emissions have fallen 69% since 2000.⁹⁶ In addition, reductions in coal use have helped reduce power sector greenhouse gas emissions that contribute to climate change by 20% since 2005.⁹⁷ The recent reductions in carbon pollution from the power sector—historically the country's largest source of greenhouse gas emissions—are vital to

⁹⁵ See, e.g., U.S. Energy Information Administration, *Sulfur Dioxide Emissions from U.S. Power Plants have Fallen Faster than Coal Generation*, Today in Energy (Feb. 3, 2017), at <https://www.eia.gov/todayinenergy/detail.php?id=29812#> (citing 73% reduction in sulfur dioxide emissions from the power sector between 2006 and 2015); see also MJ Bradley & Associates, *Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the United States*, at 2 (June 2017), available at <http://mjbradley.com/sites/default/files/Benchmarking-Air-Emissions-2017.pdf> ("In 2015, power plant [sulfur dioxide] and [nitrogen oxides] emissions were 87 percent and 79 percent lower, respectively, than they were in 1990.").

⁹⁶ MJ Bradley & Associates, *supra* note 95, at 2.

⁹⁷ See, e.g., U.S. Energy Information Administration, *Carbon Dioxide Emissions from Electricity Generation in 2015 Were Lowest Since 1993*, Today in Energy (May 13, 2016), available at <https://www.eia.gov/todayinenergy/detail.php?id=26232>; MJ Bradley & Associates, *supra* note 95, at 2 ("In 2015, power plant [carbon dioxide] emissions were 20 percent below 2005 levels.").

avoiding the worst effects of climate change⁹⁸ and therefore those reductions provide significant benefits to the states. Prolonging the operation—and air emissions—of coal-fired power plants that would otherwise retire and be replaced by cleaner energy resources would harm our states by threatening this progress in reducing harmful pollution and emissions and would aggravate and worsen the damage to our states that these facilities can cause.

As it did with Order 888, before taking final action on a rulemaking with such significant environmental impacts, the Commission must conduct a full environmental review of the Proposal under the National Environmental Policy Act by preparing an environmental impact statement. *See* 42 U.S.C. § 4332(C).

CONCLUSION

DOE issued the Proposal under section 403 of the Department of Energy Organization Act, a rarely used statutory provision that permits DOE to propose rules for consideration by the Commission. Pursuant to that authority, DOE directed the Commission to take final action on the Proposal within 60 days of its publication of the Federal Register, that is, by December 9, 2017. In light of the numerous pending proceedings before the Commission, in the regional markets,

⁹⁸ EPA has concluded that greenhouse gases, including carbon dioxide, endanger public health and welfare by causing more intense, frequent, and long-lasting heat waves; worse smog in cities; longer and more severe droughts; more intense storms such as hurricanes and floods; the spread of disease; and a dramatic rise in sea levels. *See* Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496, 66,497, 66,524-66,525, 66,532-66,533 (Dec. 15, 2009). These effects harm our state residents, infrastructure, and industries, such as farming, tourism, and recreation, as well as the states' wildlife habitats. *See* Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,682 (Oct. 23, 2015). *See also Our Changing Planet: The U.S. Global Change Research Program for Fiscal Year 2017*, at 2 (Nov. 2016), available at <http://www.globalchange.gov/browse/reports/our-changing-planet-FY-2017> (climate-driven impacts include risks to human health; more frequent and intense storms that threaten food security, infrastructure, and livelihoods; sea level rise and coastal flooding; international stability; and U.S. national security).

and in states that seek to strengthen power system reliability and resource adequacy and to examine the fuel security issues raised by the Proposal, and given the lack of legal basis or factual support for any Commission action similar to the Proposal, the undersigned Attorneys General, state agencies, and state consumer advocates urge the Commission to take final action to decline further consideration of the Proposal and its recommended regulatory changes.

Respectfully submitted,

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ATTORNEY GENERAL OF
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Dated October 23, 2017

Stanton, Kimberly (CONTR)

From: Johnsen, Steven (MA)
Sent: Tuesday, May 15, 2018 7:36 AM
To: Stanton, Kimberly (CONTR)
Cc: Standley, Erica
Subject: FW: Letter from Senator
Attachments: 2018.05.14 Letter to DOE_Defense Production Act-Federal Power Act.pdf

Please log and assign to OE, GC, CI, PA concurrences required. Thanks!

From: Smith, Wayne D
Sent: Monday, May 14, 2018 6:20 PM
To: Johnsen, Steven (MA) <Steven.Johnsen@hq.doe.gov>; Standley, Erica <Erica.Standley@hq.doe.gov>
Subject: FW: Letter from Senator

For the system please.

Wayne D. Smith | Director
 Office of the Executive Secretariat
 U.S. Department of Energy | wayne.smith@hq.doe.gov
 (202) 586-6207 | (b) (6) (mobile)

From: Burnison, Melissa
Sent: Monday, May 14, 2018 6:14 PM
To: Smith, Wayne D <Wayne.Smith@hq.doe.gov>
Cc: Brouillette, Dan <Dan.Brouillette@hq.doe.gov>; Garrish, Theodore <Theodore.Garrish@hq.doe.gov>; Cunningham, Sean <Sean.Cunningham@hq.doe.gov>; Fibbe, George <George.Fibbe@hq.doe.gov>; Colgary, James <James.Colgary@hq.doe.gov>; McCormack, Brian <Brian.Mccormack@hq.doe.gov>; Wilmot, Dan <Dan.Wilmot@hq.doe.gov>; Bolton, Dwayne S. <Dwayne.Bolton@hq.doe.gov>
Subject: FW: Letter from Senator

Wayne, attached please find a letter re: DPA from Senator Markey.

Melissa F. Burnison
 Assistant Secretary
 Congressional and Intergovernmental Affairs
 U.S. Department of Energy
 1000 Independence Ave., SW
 Washington, DC 20585
 (202) 586-5450
 (b) (6) cell

From: Richer, Claire (Markey) [mailto:Claire_Richer@markey.senate.gov]
Sent: Monday, May 14, 2018 6:11 PM
To: Burnison, Melissa <Melissa.Burnison@hq.doe.gov>

Cc: Griffith, Lindsey (Markey) <Lindsey_Griffith@markey.senate.gov>

Subject: Letter from Senator

Hello Melissa,

Senator Markey has written the following letter to Secretary Perry. Please let us know if it has been received.

All the best,

Claire Richer
Legislative Correspondent & Mail Manager
Senator Edward J. Markey
255 Dirksen Senate Office Building
Washington, D.C. 20510
Ph: 202-224-2742

EDWARD J. MARKEY
MASSACHUSETTS

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FOREIGN RELATIONS

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SMALL BUSINESS AND ENTREPRENEURSHIP

CHAIRMAN:

U.S. SENATE CLIMATE CHANGE TASK FORCE

United States Senate

May 14, 2018

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The Honorable Rick Perry
Secretary
U.S. Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Dear Secretary Perry:

Recent reports indicate that you may be considering the use of obscure provisions of law in an effort to move forward with policies designed to, in effect, bail out coal plants on the backs of American consumers. A previous Department of Energy (DOE) proposal with a similar aim, under the guise of preventing a grid reliability emergency, was already unanimously rejected by the Federal Energy Regulatory Commission (FERC).

In September of 2017, DOE tried to direct FERC to take "immediate action...to require organized power markets to value fuel security" by invoking Section 403 of the Department of Energy Organization Act. FERC unanimously concluded DOE's proposal, which would have led to direct federal support for companies that own merchant coal plants, was not necessary and would harm markets and consumers.¹ FERC made clear that ratepayers should not be forced to subsidize generators that can no longer compete in the electricity market. FERC specifically said, "[T]he Proposed Rule would allow all eligible resources to receive a cost-of-service rate regardless of need or cost to the system. The record, however, does not demonstrate that such an outcome would be just and reasonable." FERC went on, "It also has not been shown that the remedy in the Proposed Rule would not be unduly discriminatory or preferential." FERC's decision to reject DOE's proposal was supported by a broad range of stakeholders, including former commissioners, free-market think tanks, environmental law groups, and the natural gas and oil industries.

However, recent reports indicate DOE is considering an emergency rulemaking under Section 202(e) of the Federal Power Act, Section 215A of the Federal Power Act, or the Defense Production Act of 1950, to support coal and nuclear generators. In your hearing before the House Science Committee on Wednesday, May 9th you said that the Department of Energy is "looking very closely at [a] number of ways to approach this." Attempting to move forward with an emergency rulemaking under Section 202(e) of the Federal Power Act, Section 215A of the

¹ Order Terminating Rulemaking Proceeding, Initiating New Proceeding, and Establishing Additional Procedures, 162 FERC ¶ 61,012 (Jan. 8, 2018)

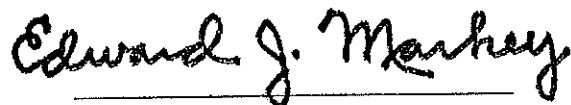
The Honorable Rick Perry
May 14, 2018
Page 2

Federal Power Act, or the Defense Production Act of 1950 to support coal and nuclear generators would not be a proper use of these authorities,

Yet again, a diverse group of stakeholders has urged you to reject these options, including representatives of the natural gas, renewable energy, petroleum oil, independent power plants, and energy efficiency sectors. FERC has already determined that out-of-market payments or subsidies are not appropriate for generators that are not competitive, and the orderly retirement of numerous power plants due to economic reasons does not constitute an "emergency" threat to national security.

I urge you to follow the law and respect the Federal Power Act, and not to attempt to proceed with misusing obscure provisions of law to issue rules to artificially and unnecessarily prop up generators that are no longer competitive.

Sincerely,

A handwritten signature in black ink that reads "Edward J. Markey". The signature is written in a cursive style and is positioned above a horizontal line.

Edward J. Markey
United States Senator

From: Jennifer Lamy
Cc: [AskOE](#)
Subject: Comment: DOE's Use of Federal Power Act Emergency Authority
Date: Thursday, May 17, 2018 10:13:16 AM
Attachments: [BICEP Letter - Comment on use of FPA 202\(c\).pdf](#)

Attached please find comments from Anne Kelly, Senior Director of Policy at Ceres, on behalf of the Business for Innovative Climate and Energy Policy (BICEP) network.

Please direct any questions to kelly@ceres.org.

Thank you,

Jennifer Lamy
Associate, Policy
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BICEP Members:

Adobe
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Aspen Skiing Company
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Aveda
Ben & Jerry's
Burton Snowboards
CA Technologies
Clif Bar & Company
Dignity Health
eBay Inc.
Eileen Fisher
Etsy
Fetzer Vineyards
Gap Inc.
General Mills, Inc.
Hackensack Meridian Health
IKEA
JLL
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Portland Trail Blazers
Salesforce
Seventh Generation
SFO
Sierra Nevada Brewing
Squaw Valley
Starbucks
Stonyfield Farm
Symantec Corporation
Timberland
Unilever
Vail Resorts
VF Corporation
Vulcan, Inc.
Worthen Industries

May 16, 2018

The Honorable Rick Perry
Secretary
United States Department of Energy
1000 Independence Ave. SW
Washington DC 20585

Dear Secretary Perry,

On behalf of the BICEP (Business for Innovative Climate and Energy Policy) network I write to oppose a recent request from FirstEnergy Solutions Corps (FES) for an emergency order under section 202(c) of the Federal Power Act. Such intervention is not necessary to ensure a reliable electricity supply and will raise costs for ratepayers and American businesses that regularly rely on competitive electricity markets to power their operations. Supporting uneconomic power plants in this manner would also have the effect of slowing the deployment of cost-effective renewable and low-carbon energy in many regions of the United States.

Emergency intervention is not necessary or justified in this case. Section 202(c) is intended for situations involving a sudden increase in energy demand or sudden shortage of energy that threatens the reliable supply of energy to consumers. In August of 2017, however, the Department of Energy itself reported that the increased deployment of renewable energy has not posed a threat to grid reliability.ⁱ Recently, PJM - a regional transmission organization operating in areas of the Midwest, Mid-Atlantic, and Southeast, reported that the anticipated retirement of the three FirstEnergy nuclear plants over the coming year would pose no threat to the reliability of electricity service.ⁱⁱ

Furthermore, the Federal Energy Regulatory Commission (FERC) recently rejected a similar proposal from the Department of Energy, finding that there was no significant evidence of a threat to grid reliability.ⁱⁱⁱ The Commission voted unanimously against the immediate implementation of the Grid Resiliency Pricing proposal, citing information provided by regional transmission organizations (RTOs) and independent system operators (ISOs), states, and other industry experts and instead began a process of defining

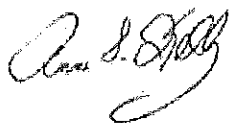
and understanding grid resilience. By attempting to sidestep this ongoing process at FERC, FES is ignoring a large body of evidence against the need for emergency intervention.

Using emergency authority to support FirstEnergy's plants would result in increased costs for electricity customers. As major consumers of energy in the US, companies in the BICEP network - and many others - rely on reasonably priced, readily available energy. Increased costs, which are unnecessary in this case given the reasons above, are passed on to ratepayers, which include not only American households but also major businesses. The proposed order would increase operating costs, such as energy inputs, and raise the cost of production of US goods without any tangible benefit. Competitive energy markets, where they exist, should be allowed to provide solutions that ensure reliability on their own - and they do. In fact, FERC commissioner Rob Powelson said on May 2, 2018 about FirstEnergy's request, "These old inefficient power plants need to retire. You can't have a market when you're sending wrong price signals to people who need to enter and exit."^{iv}

Providing uneconomic plants with arbitrary cost assurances also slows down the transition to and adoption of renewable energy, the cost of which has dropped - and continues to drop - significantly in recent years. Companies in the BICEP network, among others, have made ambitious renewable energy procurement commitments. In fact, nearly half of all Fortune 500 companies have set targets to reduce greenhouse gas emissions, improve energy efficiency, and/or increase renewable energy sourcing. Overall, Fortune 500 companies that have set goals collectively to save nearly \$3.7 billion annually through their clean energy and energy efficiency initiatives.^v Because supporting plants that cannot compete with lower cost energy sources would slow the deployment of increasingly affordable renewable energy, doing so would also harm US businesses.

I welcome the opportunity to discuss this issue further, and respectfully request that you reject the FES request for an emergency order under section 202(c) of the Federal Power Act. Thank you for your time and consideration. Please contact me at kelly@ceres.org if you have any questions.

Sincerely,



Anne Kelly
Senior Director, Policy and BICEP Network
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The Ceres BICEP Network comprises influential companies advocating for stronger climate and clean energy policies at the state and federal level in the U.S. As powerful champions of the accelerated transition to a low-carbon economy, Ceres BICEP Network members have weighed in when it has mattered most. For more information on the Ceres BICEP Network, click [here](#).

ⁱ US Department of Energy, *Staff Report to the Secretary on Electricity Markets and Reliability*. 2017. https://www.energy.gov/sites/prod/files/2017/08/f36/Staff%20Report%20on%20Electricity%20Markets%20and%20Reliability_0.pdf

ⁱⁱ PJM Interconnection LLC Transmission Expansion Advisory Committee, *Generation Deactivation Notification Update*. 2018. <http://www.pjm.com/-/media/committees-groups/committees/teac/20180503/20180503-teac-generation-deactivation-notification.ashx>

ⁱⁱⁱ US Federal Energy Regulatory Commission, *Order Terminating Rulemaking Proceeding, Initiating New Proceeding, and Establishing Additional Procedures*. 2018. <https://www.ferc.gov/CalendarFiles/20180108161614-RM18-1-000.pdf>

^{iv} E&E, *FERC's Powelson cautions on use of 1950 law to help coal*. 2018. <https://www.eenews.net/energywire/stories/1060080695/>

^v CDP, Calvert Research and Management, Ceres, and World Wildlife Fund, *Power Forward 3.0: How the largest U.S. companies are capturing business value while addressing climate change*. 2017. <https://www.ceres.org/resources/reports/power-forward-3>

From: Lee Fuller
To: [AskOE](#)
Cc: [Bennett, Shawn](#); [Winberg, Steven](#)
Subject: IPAA Concerns About Initiatives to Address Electric Power Generation Resiliency
Date: Thursday, May 17, 2018 1:52:56 PM
Attachments: [IPAA Letter to DOE Secretary Perry on Resiliency 05-17-2018.pdf](#)

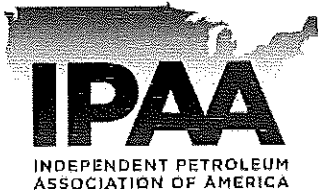
Please find attached a letter from the Independent Petroleum Association of America and other national and state oil and natural gas production industry associations urging the Department of Energy to refrain from imposing any action under the Department of Energy's emergency authorities to provide economic support favoring a particular class of power plants, as proposed by First Energy Solutions and its affiliates. These organizations believe that there is no emergency or threat to the national defense on which the Department could lawfully base the exercise of its emergency authorities. Consequently, we urge the Secretary to focus the Department's efforts on encouraging production and use of all fuels—a result that can only be achieved by rejecting calls to artificially inflate one source over another.

We appreciate the opportunity to supply this information and look forward to working with the Department to find sound solutions to assure the resiliency of the nation's power grid.

Lee Fuller

Executive Vice President

Independent Petroleum Association of America



May 17, 2018

By Electronic Submission

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Secretary Perry:

This letter urges you to refrain from imposing any action under the Department of Energy's emergency authorities to provide economic support favoring a particular class of power plants, as urged by First Energy Solutions and its affiliates. It is submitted on behalf of the Independent Petroleum Association of America (IPAA), the American Exploration & Production Council (AXPC), the Association of Energy Service Companies (AESC), the International Association of Drilling Contractors (IADC), and the following organizations:

Colorado Oil & Gas Association
Florida Independent Petroleum Association
Kansas Independent Oil & Gas Association
National Association of Royalty Owners
Ohio Oil & Gas Association
Oklahoma Independent Petroleum Association
Oklahoma Oil and Gas Association
Pennsylvania Independent Oil & Gas Association
Texas Alliance of Energy Producers
Texas Independent Producers and Royalty Owners Association

Collectively, these groups represent the thousands of independent oil and natural gas explorers and producers, as well as the service and supply industries that support their efforts, that will be the most significantly affected by the actions resulting from this regulatory proposal. Independent producers drill about 90 percent of American oil and gas wells, produce 54 percent of American oil and produce 85 percent of American natural gas.

The signatories ("Independent Producers") support the letter submitted to you on May 7 by a group of natural gas, renewables, and power efficiency groups ("Industry Groups"), detailing the legal infirmities of taking action under Section 202(c) of the Federal Power Act (FPA), the Defense Production Act, and Section 215A of the FPA. As explained in the group's legal analysis:

"There is no emergency or threat to the national defense on which the Department could lawfully base the exercise of its emergency authorities."

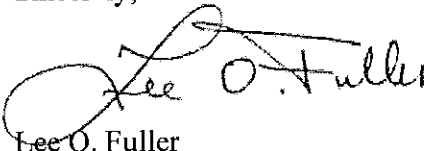
The Independent Producers have succeeded in dramatically increasing production of natural gas, bringing environmental benefits and lower electricity prices. These efforts should not be derailed by an attempt to forestall the retirement of older, uneconomic generators. With the focus on PJM, even PJM Interconnection, LLC, pointed out to the Secretary that the Department does not need to take "precipitous, immediate action" to address the corrective action requested by FirstEnergy Solutions and its affiliates. PJM stated unequivocally that "there is no immediate threat to system reliability," in its March 30, 2017, letter.

As the Industry Groups stated, "FirstEnergy's true problem is not that there is an emergency on the grip, but that its power plants lose money at current prices."

The Federal Energy Regulatory Commission ("FERC") continues to review how Independent System Operators ("ISOs") and Regional Transmission Organizations ("RTOs") manage reliability and resiliency. If changes in the pricing of power are necessary, organized markets can and are working with stakeholders, with the end product being a filing with FERC. Even without a FERC filing, independent system operators and regional transmission operators can find that certain units proposed for retirement are, in fact, necessary for system reliability and offer contracts to keep those plants on line. PJM has not made such a finding with respect to the FirstEnergy generators.

All energy sources have experienced cycles in production and/or demand. The decreased demand for coal and nuclear energy, particularly within PJM, is due in large part to the abundance of lower-cost natural gas and overall decreases in power demand. The Independent Producers urge the Secretary to focus the Department's efforts on encouraging production and use of all fuels—a result that can only be achieved by rejecting calls to artificially inflate one source over another. FERC and the independent system operators can continue with their efforts to ensure the reliability and resiliency of our nation's electric grid.

Sincerely,



Lee O. Fuller
Executive Vice President
Independent Petroleum Association of America

cc: Steven Winberg, Assistant Secretary for Fossil Energy

Shawn Bennett, Deputy Assistant Secretary for Oil and Natural Gas

May 10, 2018

Honorable Donald J. Trump
President of the United States
The White House
1600 Pennsylvania Avenue
Washington, DC 20500

Dear Mr. President:

On behalf of Citizens Against Nuclear Bailouts — a diverse coalition of Pennsylvania citizens' groups, power generators and energy, business and manufacturing associations — we are writing in opposition to the petition from FirstEnergy Solutions (FES) for an emergency order under the Federal Power Act.

FES' petition is a Hail Mary attempt from an insolvent corporation to acquire a federal government-funded bailout. The company's request comes as a result of its financial mismanagement, and now it expects hardworking Americans to pay more for electricity to continue its operations.

This request from FES is not the first time it has sought federal or state government intervention. It previously tried, to no avail, to acquire subsidies from Ohio consumers and from the Federal Energy Regulatory Commission. Now, FES is asking the federal government to invoke a wartime power to make its business immune to electricity competition. This action undoubtedly would shift increased financial burden onto consumers.

Any federal intervention would contradict this administration's objectives to achieve energy dominance, improve American infrastructure and grow our economy. Granting the order would undermine competition, harming low U.S. energy prices, stifling new investments and innovation, and signaling that the administration favors one form of energy over others.

Should FES nuclear plants be shuttered, the grid would remain reliable and resilient. PJM Interconnection, the regional transmission operator of the electric grid and markets that the FES plants serve, has indicated that closure of the FES plants would not present reliability concerns. Given PJM's critical role in ensuring grid reliability, its assurances are a clear illustration that the closure of FES' plants is not an emergency, as its petition claims.

To be clear, our coalition values all sources of energy, so long as power generation industries compete by the same rules, without government mandates or subsidies.

Energy competition has provided innumerable benefits, including lower electricity prices, to customers and businesses. In Pennsylvania, this has produced a competitive energy marketplace with prices below the national average. Approving FES' request would disrupt the marketplace and increase rates for our seniors, small businesses, manufacturers, transit systems, hospitals, schools, municipal governments and more. These higher energy prices would burden our federal government by increasing operational costs.

**NONUKE
BAILOUT**

Section 202(c) of the Federal Power Act states that an emergency may be declared during the continuance of any war or when a sudden increase or shortage exists. It is not meant to be used to bail out a company that failed to adapt to competition. We trust you will see that this attempt does not require an emergency order and that you will remain committed to protecting energy competition and the free market, which have made our country the envy of the world.

Sincerely,

Citizens Against Nuclear Bailouts

Citizens Against Nuclear Bailouts is a diverse coalition of Pennsylvania citizens' groups, energy consumers, power generators and energy, business and manufacturing associations opposed to any federal or state effort to require consumers to pay higher energy bills to bail out the nuclear energy industry in Pennsylvania.

CC:

Honorable Rick Perry, Secretary, Department of Energy
Chairman Kevin McIntyre, Federal Energy Regulatory Commission
Commissioner Cheryl LaFleur, Federal Energy Regulatory Commission
Commissioner Nell Chatterjee, Federal Energy Regulatory Commission
Commissioner Robert Powelson, Federal Energy Regulatory Commission
Commissioner Richard Glick, Federal Energy Regulatory Commission

**NONUKE
BAILOUT**

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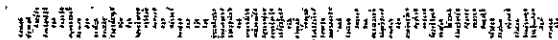
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Honorable Rick Perry, Secretary
Department of Energy
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

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AMERICAN
OVERSIGHT

DOE-17-0427-B-001883

From: Borchers, Dylan
To: AskOE
Cc: "senator@brown.senate.gov"; "senator@portman.senate.gov"; "joyce.beatty@mail.house.gov"; "steve.chabot@mail.house.gov"; "warren.davidson@mail.house.gov"; "marcia.fudge@mail.house.gov"; "bob.gibbs@mail.house.gov"; "bill.johnson@mail.house.gov"; "jim.jordan@mail.house.gov"; "david.joyce@mail.house.gov"; "marcy.kaptur@mail.house.gov"; "robert.latta@mail.house.gov"; "james.renacci@mail.house.gov"; "tim.ryan@mail.house.gov"; "steve.stivers@mail.house.gov"; "patrick.tiberi@mail.house.gov"; "michael.turner@mail.house.gov"; "brad.wenstrup@mail.house.gov"
Subject: Ohio Independent Power Producers - Letter to DOE regarding Federal Power Act Section 202(c) [BRICKER-WS.FID1158350]
Date: Tuesday, May 22, 2018 3:03:45 PM
Attachments: [image001.jpg](#)
[Ohio IPP Letter Re FirstEnergy Solutions' Request for Emergency Relief under Section 202 of the Federal Power Act and the Defense Production Act of 1950.pdf](#)

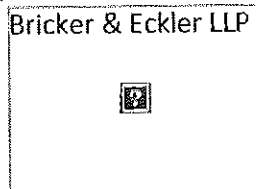
Good afternoon,

The Ohio Independent Power Producers respectfully submits the attached letter to Secretary Perry and the U.S. Department of Energy regarding the recent request by FirstEnergy Solutions for emergency relief under Federal Power Act Section 202(c).

Please do not hesitate to contact me if you have any questions.

Regards,

Dylan



Dylan F. Borchers

Associate

Bricker & Eckler LLP | 100 South Third Street | Columbus, OH 43215

Direct Dial 614.227.4914 | dborchers@bricker.com | [v-card](#) | www.bricker.com

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Smart American Energy in Carroll County



CLEAN ENERGY FUTURE



May 21, 2018

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: FirstEnergy Solutions' Request for Emergency Relief under Section 202 of the Federal Power Act and/or the Defense Production Act of 1950

Dear Secretary Perry:

The Ohio Independent Power Producers (Ohio IPP), a nonprofit trade association representing the interests of developers and operators of new power plant investments in Ohio, writes to express its strong opposition to the above-referenced request filed by FirstEnergy Solutions and affiliates (FES) on March 29, 2018.¹ FES' request for emergency relief is not needed for grid reliability and will threaten continued private innovation and investment in new generation assets.

- I. The Ohio IPPs are investing billions of dollars in private capital in new, efficient, and reliable generation technology to provide lost-cost energy to millions of consumers.**

The new natural gas power plants in Ohio account for approximately \$10 billion in new private sector investment and the creation of over 14,000 construction jobs. These projects range from those already in commercial operation to projects in the advanced stages of preconstruction development.² The new plants play a critical role in meeting our region's electricity needs, while also driving economies in the communities where we operate. Our projects will generate approximately 10GW of reliable, efficient and clean electricity, powering millions of businesses and homes across the region. More such projects are planned if the competitive market is allowed to function.

¹ Signatories to this letter include the Oregon Clean Energy Center, an 800 MW facility in commercial operations; Carroll County Energy, a 700 MW facility in commercial operations; the Lordstown Energy Center, a 940 MW facility under construction; the Trumbull Energy Center, a 940 MW facility approved by the Ohio Power Siting Board; the Oregon Energy Center, a 955 MW facility approved by the Ohio Power Siting Board; and the Guernsey Power Station, a 1650 MW facility approved by the Ohio Power Siting Board.

² Attached to this letter is a map showing the new natural gas power plant investment in Ohio and the stage of development for each project.

Our projects are also driving significant ancillary infrastructure development, including hundreds of miles of new natural gas transmission pipelines. These infrastructure investments create a platform for additional economic development opportunities for the communities in which we operate.

This investment in new generating facilities has been led by the relatively low cost of natural gas due to the abundant supplies in the Marcellus and Utica shale formations, as well as innovations in gas generation technology increasing plant efficiency. In addition, price signals from the PJM Interconnection's (PJM) competitive markets encourage investment in new generation to replace aging and uneconomic assets. These factors result in low cost production of electricity.

II. Granting FES' request for emergency relief is not needed for grid reliability.

Despite FES' assertions, there is simply no evidence that the retirement of certain FES coal and nuclear facilities will create an "emergency condition" in upcoming years. The North American Electric Reliability Corporation State of Reliability 2017 report found that the United States' Bulk Power System was adequate, with the CEO commenting that the *"state of reliability in North America remains strong, and the trend line shows continuing improvement year over year."* Indeed the U.S. Department of Energy's (Department) own staff report, which preceded the Department's Notice of Proposed Rulemaking in August 2017, concluded that system *"reliability is adequate despite the retirement of a portion of baseload capacity and unique regional hurdles posed by the changing resource mix."*

Moreover, there is no evidence of any potential reliability emergency within the PJM region. PJM maintains reliability of the electric power system within its footprint through market-based mechanisms and has consistently maintained its target reserve margin to serve peak loads. PJM supplements the energy and ancillary service revenues earned by generators in the day-ahead and real-time markets through its Reliability Pricing Model ("RPM") market. The RPM market is a capacity market that ensures there are sufficient capacity resource products available to maintain system reliability. The design of the RPM market has evolved over time, and PJM has demonstrated that it will make modifications to the market design to address changing reliability needs of customers and to ensure that sufficient capacity resources are available to maintain system reliability.³

PJM will also examine the specific impacts to the stable and reliable operation of the grid as a result of the retirement of certain FES coal and nuclear plants. Under its tariff, PJM will conduct a thorough analysis to determine whether the announced retirements will present systemic adequacy issues or any local reliability issues.⁴ In the event that PJM finds that the retirement of an FES plant will result in an adequacy or reliability issue, PJM will address the issue with a variety of tools, including, if necessary, offering full cost-of-service compensation to induce FES' assets to remain online.⁵ Thus far, PJM has

³ For example, PJM proposed further revisions to the RPM market to address potential reliability issues raised by the extremely cold weather experienced in January and February of 2014. PJM proposed to increase the performance incentives for capacity resources to be available when needed most, help reduce price spikes during system emergencies, and reduce the chance of expensive forced outages (the PJM Capacity Performance Proposal). FERC subsequently approved, with modification, the PJM Capacity Performance Proposal.

⁴ See, Part V of the PJM Tariff.

⁵ Further, PJM indicated, in a March 30, 2018 letter to the Department regarding the above-referenced request, that it could join FES' request for emergency relief if PJM's remedial options prove to be insufficient to address a potential adequacy or reliability issues resulting from the retirement of FES' coal and/or nuclear facilities. PJM's

indicated that it does not expect the power plant deactivations planned by FES to adversely affect the reliability of the PJM system.⁶

III. Granting FES' request will undermine new innovation and investment, with the result of harming grid reliability.

PJM has been successful sending appropriate pricing signals to encourage new investment in the market to replace uneconomic assets. As a result, of billions of dollars in new capital has been invested in competitive power generation facilities. Built largely to leverage abundant, domestic shale gas resources, these facilities are generating reliable, around-the-clock power for millions of consumers throughout the PJM region. Interference with the competitive market by granting FES' request, however, would jeopardize the competitive market structure that makes investment in new, efficient technology possible, as well as risk thousands of jobs. Simply put, picking winners and losers fundamentally skews this process and, by default, slows the pace of positive innovation and investment. As a result, consumers will face higher prices.

Indeed, granting FES' request will likely harm grid reliability by chasing away the very innovation and investment in new generation needed to maintain the long-term integrity of the grid.

We urge the Department to maintain the competitive electricity markets and reject the FES' request for emergency relief under Section 202 of the Federal Power Act and/or the Defense Production Act of 1950.

Respectfully submitted,

Apex Power Group

Caithness Energy

Clean Energy Future

Lordstown Energy Center

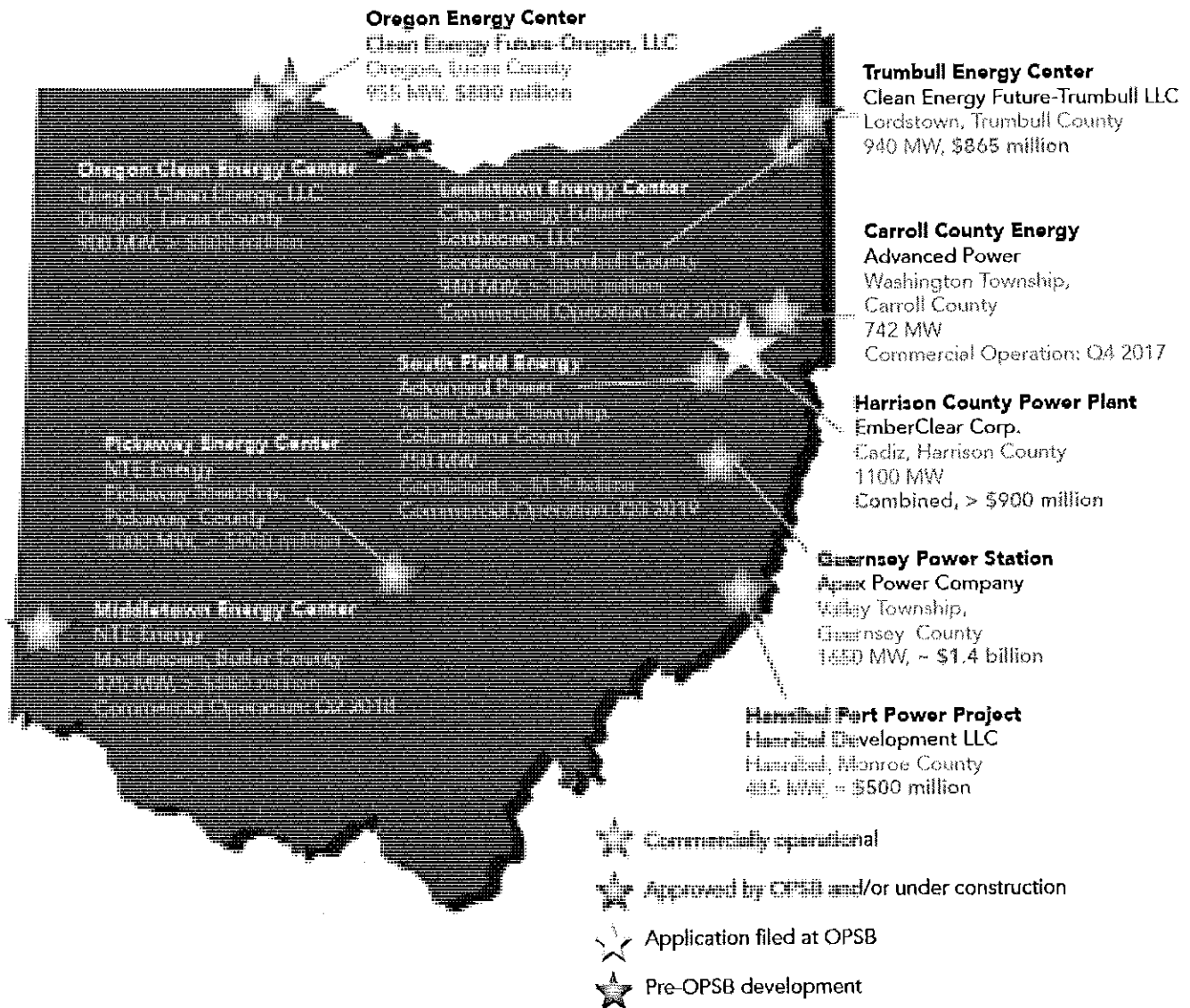
Oregon Clean Energy

Carroll County Energy

cc: Members of the Ohio Congressional Delegation

reasoned explanation highlights that there is simply no need for the Department to take immediate action to grant FES' request.

⁶ See, PJM "Generation Deactivation Notification Update" (May 3, 2018), available at <http://www.pjm.com/-/media/committees-groups/committees/teac/20180503/20180503-teac-generation-deactivation-notification.ashx>.



Compiled by Bricker & Eckler LLP

May 24, 2018

**UNITED STATES DEPARTMENT OF ENERGY'S
USE OF FEDERAL POWER ACT EMERGENCY AUTHORITY**

Comments of Microsoft Corporation

Microsoft Corporation ("Microsoft") appreciates the opportunity to offer these comments on the appropriate use by the U.S. Department of Energy ("DOE" or "the Department") of emergency authority under sections 202(c) or 215A of the Federal Power Act or under the Defense Production Act of 1950. Microsoft believes it is critical that the Department consider the perspective of large corporate energy consumers, such as Microsoft, that actively purchase energy in FERC-jurisdictional markets like the PJM energy market and that require resilient and reliable 24 x 7 energy supply for their operations.

Microsoft uses an increasingly large amount of electricity to power our datacenters throughout the nation, and depends upon a very high degree of reliability in order to meet its always-on uptime commitments to its customers. Microsoft has seen no evidence of the kind of imminent emergency that would warrant DOE's exercise of its emergency authorities. Moreover, there is no basis for invoking the extraordinary step of broad-scale intervention in the operations and price-setting of the competitive wholesale electricity markets. Rather, Microsoft's experience shows that market-based regulatory policies enable the adoption of cost-effective technical innovations that lower consumer costs and enhance grid reliability, without the need for disruptive and unfair out-of-market interventions. We have found that a competitive electricity market structure is essential to driving lowest-cost supply while maintaining reliability. We've also found that a market-based approach best enables our development of innovative approaches that enhance grid reliability, lower costs and also achieve the cleaner generation demanded by our customers.

Microsoft has not seen any evidence to date that an interventionist approach is necessary to improve the resiliency, reliability, or any other aspect of the power system. Instead, Microsoft is deeply concerned that the particularized use of Federal Power Act emergency authorities sought by FirstEnergy

Solutions Corp. (“FirstEnergy”) in its March 29, 2018, Petition to the Secretary, is unwarranted, unnecessary, and unwise for energy consumers and the broader market of energy suppliers. The requested emergency intervention would reward uneconomic facilities and lagging technologies, forcing their subsidization by ratepayers, thus distorting energy markets in ways that will increase energy prices for all consumers, reduce competition, impede innovation, and actually stand in the way of continued expansion of a more resilient and environmentally sustainable grid.

FirstEnergy’s Petition, and the ongoing Federal Energy Regulatory Commission (FERC) rulemaking inquiry on grid resilience and reliability, certainly raise important questions about the ability of the power system to sustain itself during -- and to recover from -- sabotage and natural disasters. Microsoft believes that it is important to air these concerns and ensure they are being addressed. In many cases, companies like Microsoft have already been investing in assets and technologies to help increase the resiliency and reliability of the grid. Continuing the current market-based approach would support such innovation by Microsoft and other players in the energy market. An affordable, reliable, resilient -- and environmentally sustainable -- electricity system is vital to our business, as well to the economic and national security of the United States. Innovation and market operations remain the surest pathway to achieving fuel diversity and a more resilient grid. However, granting relief under the Petition would require the imposition of cost-of-service (“CoS”) regulation on the PJM market, thereby undermining market competition. Accordingly, Microsoft believes that the action requested by the Petition would not advance resiliency or reliability nor help assure energy security for the country.

Microsoft’s long-term energy planning needs benefit from a stable regulatory framework that embraces market-based structures. Competition in PJM and other FERC- jurisdictional power markets has benefited U.S. consumers by providing reliable, affordable electricity service and, more recently, has

facilitated a market-based platform that encourages deployment of innovative and cost-competitive clean energy products and services.¹

Microsoft has deep concerns that granting relief under the Petition would introduce instability into competitive markets that will increase both costs and price volatility for consumers, as well as reduce customer choice -- all undesirable outcomes without gains to grid resiliency.

I. Microsoft's extensive investment in the future of the U.S. power system as a large energy consumer, a clean energy purchaser, and an innovator in energy technology demonstrates the path toward enhanced grid reliability.

Microsoft has three principal areas of interest in the U.S. power sector. *First*, Microsoft is a large electric energy consumer with significant operations in multiple FERC-jurisdictional markets, including PJM. *Second*, this energy powers mission-critical operations for Microsoft, a key element of which is the highly reliable provision of electricity to run our business and meet our commitments to customers. For example, Microsoft's U.S. datacenter operations require a continuous uninterruptible supply of power to run Microsoft cloud services and live up to our always-on commitments to our customers. *Third*, to meet growing customer demands for sustainable products and services, Microsoft has made major public commitments to use power from clean energy sources. To help meet these commitments, Microsoft has announced major investments of its own in clean energy generation, cutting-edge technologies, and partnerships with utilities, all of which benefit from competition in power markets.

The Petition identifies reliability and resiliency as key risks facing PJM, highlighting several extreme weather events that led competitive energy markets to increase temporarily the deployment of baseload coal and nuclear generation -- resources that are now faced with eventual phase out as being

¹ Several recent studies from premier academic and market sources have found that competitive power markets provide consumers with billions of dollars in savings of energy supply and services. Not only have competitive markets supported customer planning and reliability needs, but they have also served as a platform for deploying innovative clean energy technologies. See Steve Cicala, "Imperfect Markets versus Imperfect Regulation in U.S. Electricity Generation," University of Chicago, Jan 22, 2017. Available at: http://home.uchicago.edu/~scicala/papers/elec_gov_v_mkt_draft_2.pdf. Also see PJM Interconnection, "Resource Investment in Competitive Markets," May 5, 2016. Available at: www.pjm.com.

uneconomic. The Petition seeks to address the risks of occasional weather events by locking in the use of these baseload generation resources with subsidies, resulting in market-distorting price hikes for energy consumers. There is no credible evidence from any other source that these generators are needed to address reliability or resiliency needs of the PJM market or even that there is a reliability or resilience problem. Instead, Microsoft's own experiences in securing power in the PJM market, which represents one of Microsoft's biggest datacenter regions and hence one of its largest markets for securing power, is that there has not been a reliability or resiliency issue with its own energy procurement. Instead, the PJM market is one where Microsoft has successfully invested in new sources of energy generation and pursued other energy innovations. Microsoft firmly believes that market-based solutions and advanced energy technologies hold the key to increasing energy resilience and security in the United States. Microsoft's own experience has shown that innovations such as demand response, energy storage, and flexible fast-start resources -- resources facilitated by well-structured market operations -- can help increase reliability and resiliency and help prepare the U.S. power system for ever-greater quantities of generation from renewable energy.²

Nor have we seen any first-hand evidence that the growth in renewables or natural gas generation, or other nimble forms of grid resilience management, has resulted in a threat to grid reliability. We believe that this conclusion was borne out by the recent DOE Staff Report to the Secretary on Electricity

² The deployment of renewable energy continues rapidly across the United States, as corporate and public policy drive investment into the industry. According to the Advanced Energy Economy, 71 companies within the Fortune 100 have set public renewable energy or sustainability targets. According to the American Wind Energy Association, corporate and other non-utility customers held more than 50% of new wind power contracts signed in 2015. To put these numbers into context, the Lawrence Berkeley National Laboratory finds that today's existing state Renewable Portfolio Standards (RPS) goals would require more than 60 GWs of new renewables build by 2030 -- the same GW development goals that the Renewables Energy Buyers Alliance has targeted for corporate buyers by 2025.

Markets and Reliability.³ Indeed, on the whole, PJM has demonstrated ample capacity through this mix of resources to meet even its most extreme demand.⁴

Microsoft's innovative power plan for its Cheyenne, Wyoming datacenter shows how highly capable onsite energy systems at our datacenters can be deployed to provide flexible capacity to the grid when needed, bringing new generation resources into the grid in a far more nimble manner. In Cheyenne, Microsoft offered the use of its onsite natural gas backup generators as a secondary resource for the grid.⁵ This helped increase reliability and resiliency for the grid without additional costs for ratepayers, in that it avoided the need for ratepayers to pay for a new power plant or to perpetuate old, uneconomic ones. Microsoft is deeply concerned that were the Petition granted, continued innovation by major energy consumers will be stifled and the motivation for existing power providers to seek out and cooperate with customers in realizing such innovative approaches will be dampened by the perception that extraordinary relief will instead become available.

II. Consumers benefit from competition in power markets, which have provided low cost, reliable power.

U.S. businesses require steady delivery of electricity to maintain their operations, and are also sensitive to energy costs and concerns about power system resiliency. While Microsoft shares the resiliency goals that seem to animate the Petition and FERC's regulatory proceedings on resiliency, we

³ U.S. Dep't of Energy, Staff Report to the Secretary on Electricity Markets and Reliability (August 2017)(*available at* https://energy.gov/sites/prod/files/2017/08/f36/Staff%20Report%20on%20Electricity%20Markets%20and%20Reliability_0.pdf)

⁴ PJM's most recent capacity auction yielded a 23.9% reserve margin, which well exceeds its target of 16.6%. PJM's analysis of the deactivation notice from FirstEnergy regarding the retirement of three units (in 2020 and 2021) found "the deactivation of these generating units is not expected to adversely affect the reliability of the PJM Transmission System due to a combination of remedial measuresWith these measures, the PJM Transmission system will remain reliable, and therefore the generating units listed above may plan to deactivate as scheduled." PJM Comments on 202(c) application (available at: <http://www.pjm.com/-/media/documents/other-fed-state/20180430-motion-to-Intervene.ashx>).

⁵ See Brad Smith, Microsoft's President and Chief Legal Officer, Blog Post (Nov. 14, 2016) ("With our latest energy deal, Microsoft's Cheyenne datacenter will now be powered entirely by wind energy, keeping us on course to build a greener, more responsible cloud.")(available at <https://blogs.microsoft.com/on-the-issues/2016/11/14/latest-energy-deal-microsofts->).

are deeply concerned that the precipitous actions called for could actually undermine resiliency by disrupting the core functions of wholesale markets. In particular, compensating selected generating units via CoS, while other generating units depend upon market-based payments, would disrupt the ability of markets to send accurate, least-cost price signals for new innovative investments. It is also difficult to understand how CoS in FERC-jurisdictional markets such as PJM could result in just and reasonable rates for consumers.

This approach of increased use of CoS in FERC-jurisdictional markets could also trigger recurring requests for policy intervention to prevent retirements by other uneconomic generating units that do not receive cost recovery assurance. Many older generating units that have been retired also faced situations virtually identical to that facing FirstEnergy. Thus, action to provide relief under this Petition seems likely to create an unintentional ‘un-virtuous cycle,’ where costs to consumers become increasingly detached from actual wholesale market prices. Indeed, FirstEnergy’s Petition cites that, “[i]n the past four years, over 11,000 MW of coal-fired generation has closed in PJM, the equivalent of a dozen large power plants.” Petition at 7, 19. The dynamic of an effort to resuscitate uneconomic generation could jeopardize some of the key benefits to consumers afforded by competitive power markets, namely transparent, best-in-price electricity that can be managed through a portfolio or with traditional financial instruments (e.g. hedging). The perception of a non-level playing field may also dissuade new resources from entering the market, thereby hampering the development of the lowest cost energy supply.

In energy-intensive industrial applications, like datacenters, these benefits are essential for maintaining reliable operations and planning new capital investments for our business. The availability of cost-competitive, reliable, market-based electricity rates in a consistent policy environment is a critical factor in Microsoft’s decision-making for developing and siting new datacenter sites. Where policy uncertainty threatens the stability of electricity markets, it undermines the attractiveness of these regions for future economic development.

III. Competitive markets encourage the technology innovation behind a cleaner and more resilient power system.

The very essence of market-based competition is that uneconomic sources of generation get replaced by more economic ones – not that they are simply perpetuated at rate-payer expense, as the Petition seeks. Those sources that are no longer able to compete on an economic basis are appropriately shut down as more economic replacement generation becomes available. That scenario is not an emergency – it is, rather, evolutionary, fully appropriate and beneficial. Competition in FERC-jurisdictional power markets has spurred innovation in a wide range of technologies that support a more resilient grid, including battery storage, fuel cells, and a host of renewable energy technologies. Transparent pricing, market-based services on a level playing field, and technology-neutral market governance in competitive markets represent durable foundations for ongoing innovation.

Conversely, CoS for selected units in competitive markets deviates from the core principle of market-based discovery of costs and value. As a result, relief under the Petition would send inaccurate price signals to consumers about the actual costs and market value of electricity. Among the key benefits of competitive markets is their ability to accurately reflect the least-cost sources of electricity production, such that corporate consumers have visibility into their cost structures and can make informed business decisions about investment and energy technology needs. By extension, accurate pricing sends signals to entrepreneurs and researchers to develop new energy products and services to meet consumer demands. If the power system becomes defined by distorted wholesale prices eroded by non-market CoS intervention within a competitive market environment, and imposes higher non-bypassable price increases on end-users, the resulting economic dynamics would stifle price signals for the development and deployment of innovative energy products and services.

Furthermore, the current competitive market rules overseen by FERC already contain adequate provisions to provide discrete targeted relief in the event there are individual, uneconomic generating

resources that must be retained to avoid unacceptable reliability risks throughout PJM and other competitive electricity markets. PJM and other RTOs/ISOs have the ability to make reliability must run designations of selected resources and FERC has the authority to approve such designations for CoS rates on a year-by-year or shorter basis. These designations are made pursuant to a set of well-developed rules under applicable FERC-approved tariffs. And while no RTO or ISO identified an urgent reliability or resilience problem, FERC, in response to the Secretary's Notice of Proposed Rulemaking on Grid Resilience, is now conducting an inquiry to develop a common understanding of resilience, identify how RTOs and ISOs assess resilience, and examine how RTOs and ISOs mitigate threats to resilience in a market context. Accordingly, there is no need for the heavy-handed imposition of CoS regulation here or independently of FERC's ongoing inquiry.

IV. DOE does not have the authority to invoke emergency powers under the Federal Power Act or the Defense Production Act to address this general, non-exigent market evolution.

The Petition seeks to distort DOE's authorities far beyond the limited relief valve that Congress created under the Federal Power Act. Section 202(c) was not designed to allow the Department to supersede FERC's authority over wholesale rates on a scale that could pertain here and on the basis of a slowly unfolding and fully predictable set of market dynamics. As the Department's own regulations make clear, this provision was designed to address imminent and unexpected, temporary outcomes: "'Emergency,' as used herein, is defined as an unexpected inadequate supply of electric energy which may result from the unexpected outage or breakdown of facilities for the generation, transmission or distribution of electric power." 10 CFR Part 205.371. The Petition seeks to extend this limited grant to entirely new and largely unbounded circumstances that are otherwise addressed through PJM's and FERC's rulemaking processes and rate structures. It seeks to depict as an emergency the slow evolution of the electric generation market that has been underway for years. Petition at 26-27. Indeed, the only emergency the Petition cites is that facilities "continue to retire prematurely" (Petition at 12) -- hardly the imminent threat the Act and its regulations contemplate.

To the extent that the Petition may identify shortcomings with the regulation of natural gas distribution system reliability as the overall grid has become more dependent upon natural gas generation, Petition at 23 (citing the absence of a NERC equivalent for natural gas), it proposes the wrong cure. The logical remedy for this challenge is to enhance the reliability of the natural gas supply and transportation system and retain dual fuel capabilities, rather than to override competitive energy markets.

Nor does the Defense Production Act provide any other legitimate basis for action. That law, which was enacted in 1950 at the beginning of the Korean War, is designed to authorize rare and extraordinary market interventions critical for pressing national defense needs attendant to a wartime effort. The Defense Production Act does not allow the government to set prices or force market participants to buy products or services they do not wish to buy. 50 U.S.C. App. 2061 et seq.

Similarly, the more recently enacted FAST Act, which added new section 215A to the Federal Power Act, only authorizes the Department of Energy to issue temporary “orders for emergency measures” in response to a “grid security emergency.” A “grid security emergency” is defined as the occurrence or imminent danger of cyberattacks, electromagnetic pulse attacks, geomagnetic storms, and direct physical attacks that would have significant adverse effects on the reliability of critical electric infrastructure. Orders providing for “emergency measures” may last only fifteen days before an additional emergency finding is required. 16 U.S.C. section 215A(a)(7). These circumstances are not presented by the gradual and successful market evolution described by the Petition and the PJM response, nor is the remedy proposed limited in time as contemplated in the FAST Act.

Microsoft urges the Secretary to consider carefully the negative impacts on end-users regarding economic development, technology deployment, and innovation that would come from granting the extraordinary intervention that is being sought. The goals of grid reliability and resilience are better served through the on-going FERC and RTO/ISO regulatory processes that are convening power industry stakeholders to establish the technical and commercial directions necessary to prepare wholesale markets

for an influx of new technologies and consumer preferences that advance reliability and resiliency.

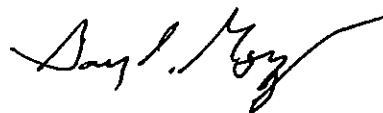
Please do not hesitate to reach out for more information should further perspective be helpful.

Dated: May 24, 2018

Respectfully submitted,

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Counsel to Microsoft Corporation

From: Debra.Bingham@occ.ohio.gov
To: [AskOE](#)
Cc: [Secretary Perry](#); [Walker, Bruce](#); [Jereza, Catherine](#)
Subject: FirstEnergy Solutions Corporation Request for Emergency Action
Date: Thursday, May 24, 2018 5:22:51 PM
Attachments: [QCC Letter.pdf](#)
[QCC MTL.pdf](#)
[QCC Protest.pdf](#)

On behalf of the Office of the Ohio Consumers' Counsel, who represent approximately 4.5 million Ohio residential utility customers, we are submitting the attached transmittal letter, Motion to Intervene and Protest in regard to the Request for an Emergency Order by FirstEnergy Solutions Corporation.

We appreciate the opportunity to address this issue. Please contact our office if you have any questions or concerns.

Thank you.

Deb Bingham

Administrative Assistant

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CONFIDENTIALITY NOTICE:

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Office of the Ohio Consumers' Counsel

May 24, 2018

Via Electronic Mail

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RE: Motion of the Office of Ohio Consumers' Counsel to Intervene

Dear Secretary Perry, Assistant Secretary Walker and Deputy Assistant Secretary Jereza:

Attached is The Office of the Ohio Consumers' Counsel's ("OCC") Motion to Intervene and Protest in the proceeding concerning FirstEnergy Solutions Corporation's ("FES") extraordinary Request for Emergency Action Under Section 202(c) of the Federal Power Act ("Request"). OCC is the statutory representative of residential utility consumers in the State of Ohio, consumers that would be adversely affected if FES' request is granted.

OCC opposes FES' Request for emergency action because there is no emergency and no justification for the relief requested. Additionally, FES' Request would require consumers in Ohio and elsewhere in the PJM region to subsidize FES' (and others) coal and nuclear plants. Requiring customers to subsidize certain coal-fired and nuclear facilities in PJM would also result in unjust, unreasonable and unduly discriminatory rates for Ohio consumers and consumers throughout the PJM region. Subsidizing certain power plants would also undermine the functioning competitive wholesale market that provides consumers reliable electric service at the lowest possible cost.

Correspondence to United States Department of Energy
May 24, 2018
Page 2 of 2

Respectfully Submitted,

Bruce Weston
Ohio Consumers' Counsel

/s/ Kevin Moore
Kevin Moore
Assistant Consumers' Counsel
Counsel for the Office of the Ohio Consumers' Counsel

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

Request for Emergency Order Pursuant)
To Federal Power Act Section 202(c)) DOE Docket No. ____
by FirstEnergy Solutions Corporation.)

**MOTION TO INTERVENE
OF
THE OFFICE OF THE OHIO CONSUMERS' COUNSEL**

The Office of the Ohio Consumers' Counsel ("OCC") moves to intervene in this matter and urges Energy Secretary Perry to reject the March 29, 2018 Request for Emergency Order, submitted by FirstEnergy Solutions Corporation ("FES"). No emergency condition exists warranting the extraordinary relief FES seeks that would require customers to subsidize certain power plants. Requiring customers to subsidize certain coal-fired and nuclear facilities in PJM would also result in unjust, unreasonable and unduly discriminatory rates for Ohio consumers and consumers throughout the PJM region. Subsidizing certain power plants would also undermine the functioning competitive wholesale market that provides consumers reliable electric service at the lowest possible cost.

I. PROCEDURAL BACKGROUND

On March 29, 2018, FES issued a letter ("Request") to Energy Secretary Perry requesting that the United States Department of Energy invoke emergency authority under Section 202(c) of the Federal Power Act ("FPA") to find that an emergency

condition exists in the PJM Interconnection, L.L.C. ("PJM") regional transmission organization. In its request, FES requests that the Secretary order PJM to enter into contracts with "certain existing nuclear and coal-fired generators" located in PJM for the supply of energy, capacity, and ancillary services to "maintain the stability of the electric grid." FES also requested that the Secretary order PJM to "promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide." FES served the Request on numerous affected parties.

II. COMMUNICATIONS

Correspondence and communications concerning the submission should be directed to:

Kevin Moore
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Office of the Ohio Consumers' Counsel
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Kevin.Moore@occ.ohio.gov

III. MOTION TO INTERVENE

OCC is the State of Ohio's statutory residential utility consumer advocate. OCC represents the interests of approximately 4.5 million Ohio residential utility customers in proceedings before state, and federal administrative agencies, and the courts.¹ OCC is an active participant in numerous state and federal regulatory proceedings, and represents Ohio residential consumers located within the PJM region. OCC advocates for affordable

¹ See Ohio Revised Code, Chapter 4911.

and reliable utility services at just, reasonable, and nondiscriminatory rates for all residential consumers within Ohio.,

The grant of FES' Request by the DOE would result in unwarranted subsidy payments to certain coal-fired and nuclear facilities in PJM. The cost of those payments likely would be collected from consumers throughout the PJM region, including the Ohio residential consumers that OCC represents. Such payments are likely to significantly increase the retail electricity rates paid by Ohio consumers. OCC opposes FES' Request and reserves the right to supplement this preliminary pleading to explain in detail why the Request should be rejected.

As required by Rule 214(b)(2), OCC states that the DOE's ruling in this matter may have a significant and adverse effect on the rates paid by Ohio's residential utility consumers. OCC moves to intervene² in this matter to protect the interests of these Ohio residential consumers who could be directly and adversely affected by this proceeding. As the statutory representative of Ohio residential consumers, OCC has a direct and substantial interest in this proceeding. No other party can represent this interest. OCC's intervention in this proceeding is in the public interest. OCC should be granted intervention as a party with all of the rights appurtenant to that status.

IV. STATEMENT OF OPPOSITION

As required by Federal Energy Regulatory Commission ("FERC") Rule 214(b)(1), the OCC's preliminary position on FES' Request is that OCC opposes granting the relief FES seeks. The available evidence (not cited in FES' Request but well documented in the comments submitted by OCC and other parties in FERC Docket No. RM18-1-000)

² See Rule 214 of the FERC's Rules of Practice and Procedure.

demonstrates that no emergency condition exists. The available evidence also demonstrates that the requested relief is unnecessary, would result in an unreasonable increase in rates paid by consumers, a less reliable electric grid, and damage to the functioning competitive wholesale market that provides consumers reliable electric service at the lowest possible cost.

V. CONCLUSION

For the foregoing reasons, OCC requests that (a) its motion to intervene be granted; (b) it be permitted to participate in this proceeding with full rights as a party; and (c) DOE reject FES' request for extraordinary emergency relief.

Respectfully submitted,

BRUCE WESTON
OHIO CONSUMERS' COUNSEL

/s/ Kevin Moore

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Assistant Consumers Counsel

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Dated: May 24, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document by electronic transmission on the unofficial service list for this matter.

Dated at Columbus, Ohio this 24th day of May 2018.

/s/ Kevin Moore

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**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

Request for Emergency Order Pursuant)
To Federal Power Act Section 202(c)) DOE Docket No. ____
by FirstEnergy Solutions Corporation.)

**PROTEST
OF
THE OFFICE OF THE OHIO CONSUMERS' COUNSEL**

To protect Ohioans (and others) from paying subsidies and above-market prices for electricity, the United States Department of Energy (“DOE” or “the Department”) should reject the Request for an Emergency Order (“Request”) submitted by FirstEnergy Solutions Corporation (“FES”) on March 29, 2018. That request would require consumers in Ohio and elsewhere in the PJM Interconnection, LLC (“PJM”) region to subsidize the coal and nuclear plants of FES and others. Requiring customers to subsidize certain coal-fired and nuclear facilities in PJM would inflict unjust, unreasonable and unduly discriminatory rates on Ohio consumers and consumers throughout the PJM region. Subsidizing certain power plants (and not others) would also undermine the functioning competitive wholesale market that provides consumers reliable electric service at the lowest possible cost.

FES’ extraordinary Request is based on the flawed assumption that the PJM electric grid will collapse without coal and nuclear resources, and consumers will experience blackouts and energy supply shortages. Nothing could be further from the truth.

To the contrary, PJM (the entity charged with the responsibility for keeping the lights on in the PJM region) flatly rejected FES' Request, stating that “without reservation there is no immediate threat to system reliability.”¹ PJM reliably operates the grid, and has more than adequate supplies available to reliably serve consumers into the foreseeable future. Just three months ago, the Federal Energy Regulatory Commission (“FERC”) agreed with PJM’s assessment when it terminated another docket (Docket No. RM18-1-000), regarding essentially the same relief FES seeks here. FES did not seek rehearing of that ruling, and its filing here is an unjustified collateral attack on that ruling.

FES’ extraordinary request is also fundamentally unjust and unreasonable for consumers. It comes at a time when market prices for electricity are low due in large part to the abundant supplies of natural gas that exist today in PJM. Consumers in Ohio and elsewhere in PJM are beginning to see lower prices for electricity from market-based pricing – after electric suppliers like FES received much higher market prices that prevailed during the 2000’s. All markets experience price swings as a result of changes in economic conditions, market fundamentals, and technological advancements.

FES essentially seeks to secure profits for shareholders during the “good times” (when market prices are high) and secure subsidies from customers for shareholders during the “bad times” (when market prices are low). In this respect, FES’s Request would create a perverse ratemaking formula where Ohioans and other PJM electric customers always would pay the higher of market-based or cost-based rates. And this result would subvert PJM’s functioning competitive markets that provide consumers

¹ PJM Letter to Secretary Perry re FES’ Request for Emergency Relief under Section 202 of the Federal Power Act at 1 (March 30, 2018).

reliable electric service at the lowest possible cost. The U.S. DOE should reject the extraordinary subsidy that FES seeks from consumers.

FES claims a concern for the reliability of the U.S. electric grid. But its real concern is that low prices for natural gas in PJM's markets have caused FES' coal-fired and nuclear resources to be uneconomic. Indeed, FES filed for bankruptcy just days after it filed its Request in this proceeding. FES' financial woes, however, are not the type of emergency Congress envisioned when it provided the DOE emergency powers regarding electricity supply.² In order to protect the residential energy consumers in Ohio, OCC requests that DOE refrain from taking the unprecedented action sought by FES. FES' Request should be rejected.

A. The DOE has no legal means to approve wholesale power contracts between PJM and the power plant owners and charge those rates to customers as FES requests.

FES requested that the DOE order PJM to enter into cost-based contracts with the owners of every coal and nuclear plant in the region. If the parties are unable to reach agreement on the amount of the subsidies, FES requests that the Secretary determine the compensation amount. But there is no legal mechanism by which the DOE could grant FES' Request.

PJM could negotiate contracts with each coal and nuclear plant in the region to compensate it for its cost of providing service. But those contracts are subject to a determination that the plant is needed for reliability under PJM's existing Open Access Transmission Tariff. The contracts are also subject to FERC's regulatory oversight to

² 16 U.S.C. § 824a(c); *see also* Department regulations, 10 C.F.R. § 205.371 (“[s]ituations where shortage of electric energy is projected due solely to the failure of the parties to agree to terms, conditions, or other economic factors relating to service, generally will not be considered emergencies unless the inability to supply electric service is imminent.”).

ensure that the rates produced in such contracts are just and reasonable under Section 204 of the Federal Power Act, 16 U.S.C. § 824d.

The courts have long held that FERC (and not DOE) has the exclusive regulatory authority to set wholesale electric rates.³ The law provides FERC the same rate-setting authority under Federal Power Act Section 202(C) requests for emergency relief from the DOE.⁴ There is no legal authority for DOE to circumvent and subvert FERC's jurisdiction over the wholesale electric rates for these resources.

B. There is no emergency or threat to Ohio or other PJM consumers that would justify the emergency action sought by FirstEnergy Solutions.

FES requests that the DOE take the unprecedented step of declaring an emergency. But there is no emergency. FES does not claim that consumers' lights have gone out due to shortages in energy supplies in the PJM region. Nor does FES claim that consumers' lights are likely to go out in the foreseeable future. In fact, the opposite is true. PJM's markets operate on a three-year forward procurement basis. That means that PJM has already procured today all of the capacity it needs to reliably serve customers through May of 2022.

In each year since PJM first began electric market operations, its markets have procured significantly more resources than were needed to reliably serve customers,

³ *Hughes v. Talen*, 136 S.Ct. 1288, 1291 (2016) ("The Federal Power Act (FPA), 41 Stat. 1063, as amended, 16 U.S.C. § 791a *et seq.*, vests in the Federal Energy Regulatory Commission (FERC) *exclusive jurisdiction over wholesale sales of electricity in the interstate market.*") (emphasis added).

⁴ See 10 C.F.R. § 205.376 ("The applicant and the generating or transmitting systems from which emergency service is requested are encouraged to utilize the rates and charges contained in approved existing rate schedules or to negotiate mutually satisfactory rates for the proposed transactions. In the event that the DOE determines that an emergency exists under section 202(c), and the "entities" are unable to agree on the rates to be charged, **the DOE shall prescribe the conditions of service and refer the rate issues to the Federal Energy Regulatory Commission for determination by that agency in accordance with its standards and procedures**") (emphasis added).

including this year and each of the next three years.⁵ In the May 2018 PJM capacity auction, PJM's capacity market procured 163,627 megawatts ("MW") of capacity for the delivery period 2021/2022. That capacity is for serving customers under a projected peak demand of 152,647 MW,⁶ resulting in a reserve margin above the level needed in excess of 21%.⁷ Additionally, there are significant quantities of new electric capacity entering the market each year, with more than 51,000 MW of new generating capacity entering the market since 2006.⁸ The net of additions reached more than 24,000 MW over that period.⁹ Contrary to FES' allegations, the reliability of the electric supply in the PJM region is simply not a concern for consumers.

The resilience of PJM's portfolio of supplies is also not a cause for concern for customers. PJM's 2017 Fuel Mix report demonstrates that the grid would be operationally reliable for customers even with 86% of its generator fuel mix comprised of natural gas generating plants.¹⁰ Additionally, PJM's analysis of the reliability attributes of the different types of power plants on its system shows that natural gas plants provide for customers almost the same level of flexibility as coal plants, and provide significantly greater flexibility than nuclear plants.¹¹ While PJM acknowledges that more work should

⁵ 2021/2022 PJM RPM Base Residual Auction Results at 6, available at <http://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx>.

⁶ *Id.* at 26.

⁷ *Id.* at 6.

⁸ *Id.* at 20.

⁹ *Id.*

¹⁰ PJM's Evolving Resource Mix and System Reliability at 5, PJM Interconnection, LLC (March 30, 2017) ("Fuel Report"), available at <http://www.pjm.com/-/media/library/reports-notice/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx>.

¹¹ Fuel Report at 16; *see also Grid Resilience in Regional Transmission Organizations and Independent System Operators*, Docket No. AD18-7-000, Comments and Responses of PJM Interconnection, L.L.C. at 71 (March 9, 2018) ("PJM Comments").

be done to improve the resilience of its system for customers, it maintains that the electric grid in its region “is safe and reliable today – it has been designed and is operated to meet all applicable reliability standards.”¹² The extent of the additional work needed to continue to provide consumers reliable service is the subject of FERC’s inquiry in Docket No. AD18-7-000. There is no evidence that would justify the DOE taking the unprecedented step of short-circuiting that process which assures consumers of reliable service.

Finally, FES’ claim that an emergency exists because PJM relied on coal and nuclear plants to provide customers service during the severe winter weather (in the first week of January 2018) is based on a flawed premise. FES is correct that PJM dispatched coal and nuclear resources to serve customers during the extreme winter weather in January 2018. However, the implication in FES’ statement that these plants were needed to serve customers because PJM had no other available sources of supply to serve customers is incorrect. FES fails to distinguish between dispatch and availability of resources for providing customers service.

PJM dispatched coal and nuclear resources in early January to serve customers because they were the lowest cost resources available during that severe “cold snap” when natural gas prices were quite high, not because it had no other sources of supply available. PJM had 137,939 MW of on-line generation during that period,¹³ and experienced 23,751 MW in capacity outages (29% of which were coal units),¹⁴

¹² PJM Comments at 4.

¹³ PJM Cold Snap Performance Dec. 28, 2017 to Jan. 7, 2018 at 13, PJM Interconnection (Feb. 26, 2018) (“Cold Snap Report”), available at <http://www.pjm.com/-/media/library/reports-notices/weather-related/20180226-january-2018-cold-weather-event-report.ashx>.

¹⁴ Cold Snap Report at 2.

accounting for 161,000 MW of PJM's total procured capacity for this past year of 167,000 MW.¹⁵ This means PJM still had more than 5,000 MW in procured capacity available if needed to serve customers.

More importantly, PJM had more than 187,473 MW of capacity in the region eligible to bid into the market for serving customers during the 2017/2018 time period.¹⁶ Some of the excess capacity may have been available for dispatch in addition to the excess 5,000 MW of procured capacity still available. PJM's study of its operations during that extreme cold weather event concluded that the grid "is diverse and strong and remains reliable" for customers.¹⁷ In other words, the market worked *exactly* as it was supposed to, providing customers with reliable electricity at the lowest possible cost.

C. FirstEnergy Solutions' Request ignores the existing, more targeted, and less expensive solution for Ohio and PJM consumers available in PJM's Tariff in the form of Reliability Must-Run contracts.

PJM has an existing mechanism for compensating resources at risk of retirement that are needed to reliably serve customers, Reliability Must Run ("RMR") contracts.¹⁸ FES noted in its Request that it had already announced to PJM that it planned to retire certain of its coal and nuclear resources. PJM indicated in its response to FES' Request in this proceeding that it is currently studying those notices and plans to issue a determination in the near future as to whether any of those generating plants are needed to reliably serve customers.

¹⁵ 2017/2018 RPM Base Residual Auction Results at 8, available at <http://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2017-2018-base-residual-auction-report.ashx?la=en..>

¹⁶ 2017/2018 RPM Base Residual Auction Results at 20.

¹⁷ Cold Snap Report at 1.

¹⁸ PJM Open Access Transmission Tariff, Section 113.

If PJM determines that the resources are needed for providing reliable service for customers, it will enter into RMR contracts, subject to FERC's regulation. Under RMR contracts the generation owner is paid its full costs for keeping the plants open. Thus, PJM already has all the tools it needs to ensure the reliability of the grid for customers without the DOE stepping in and ordering it to enter into such contracts. If needed, this existing tool can be used and is likely to cost consumers significantly less than the FES Request. This is because RMR contracts are executed only for those resources actually needed for reliability and only for limited amounts of time. FES's proposal on the other hand has nothing to do with what resources are actually needed to provide customers reliable electric service. Moreover, the RMR process comports with FERC's primary statutory responsibility, which is to provide consumers a "complete, permanent, and effective bond of protection from excessive rates and charges."¹⁹

D. FirstEnergy Solutions' Request, if granted, would result in a less reliable electric grid for consumers in Ohio and other parts of PJM.

Granting FES' Request would retain a significant quantity of uneconomic coal and nuclear resources in PJM that are not needed for providing reliable service to customers and that would otherwise retire. To customers' detriment, retention of these resources in PJM's competitive wholesale markets is likely to force other resources, which are economically viable, to leave the PJM market, or to discourage investment in new, more efficient generating plants.

PJM studies have shown that the average forced outage rate for generating plants at risk of retirement is 35%, which is significantly higher than the four percent system

¹⁹ *Atl. Ref. Co. v. Pub. Serv. Comm'n*, 360 U.S. 378, 388 (1959) (the FERC has an obligation to provide consumers a "complete, permanent, and effective bond of protection from excessive rates and charges.")

average forced outage rate for all resources on the system.²⁰ Thus, the retention of uneconomic resources that are at risk of retirement is likely to leave the PJM electric grid less reliable for customers, not more reliable. This would be bad for PJM consumers, including Ohio consumers. The DOE should reject FES' effort to bail itself out of bankruptcy by disrupting or destroying functioning electricity markets with customer-funded subsidies for uneconomic coal and nuclear plants. These FES power plants are on the verge of retirement and are less reliable for providing service to customers than the newer resources they would replace. The Request would unreasonably increase utility bills for millions of Ohio consumers.

E. CONCLUSION

OCC requests that the DOE reject the FES Request in order to protect Ohio consumers and consumers generally from paying subsidies and above-market prices for electricity in the PJM region. There is no evidence of a dire emergency that would justify the extraordinary relief FES seeks in this proceeding.

Respectfully submitted,

BRUCE WESTON
OHIO CONSUMERS' COUNSEL

/s/ Kevin Moore

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Dated: May 24, 2018

²⁰ 2016 Winter Report at 1, PJM Interconnection, LLC (May 31, 2016), available at <http://www.pjm.com/~media/committees-groups/committees/oc/20160607/20160607-item-15-2015-16-winter-report.ashx>.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document by electronic transmission on the unofficial service list in the matter.

Dated at Columbus, Ohio this 24th day of May 2018.

/s/ Kevin Moore

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Assistant Consumers' Counsel

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